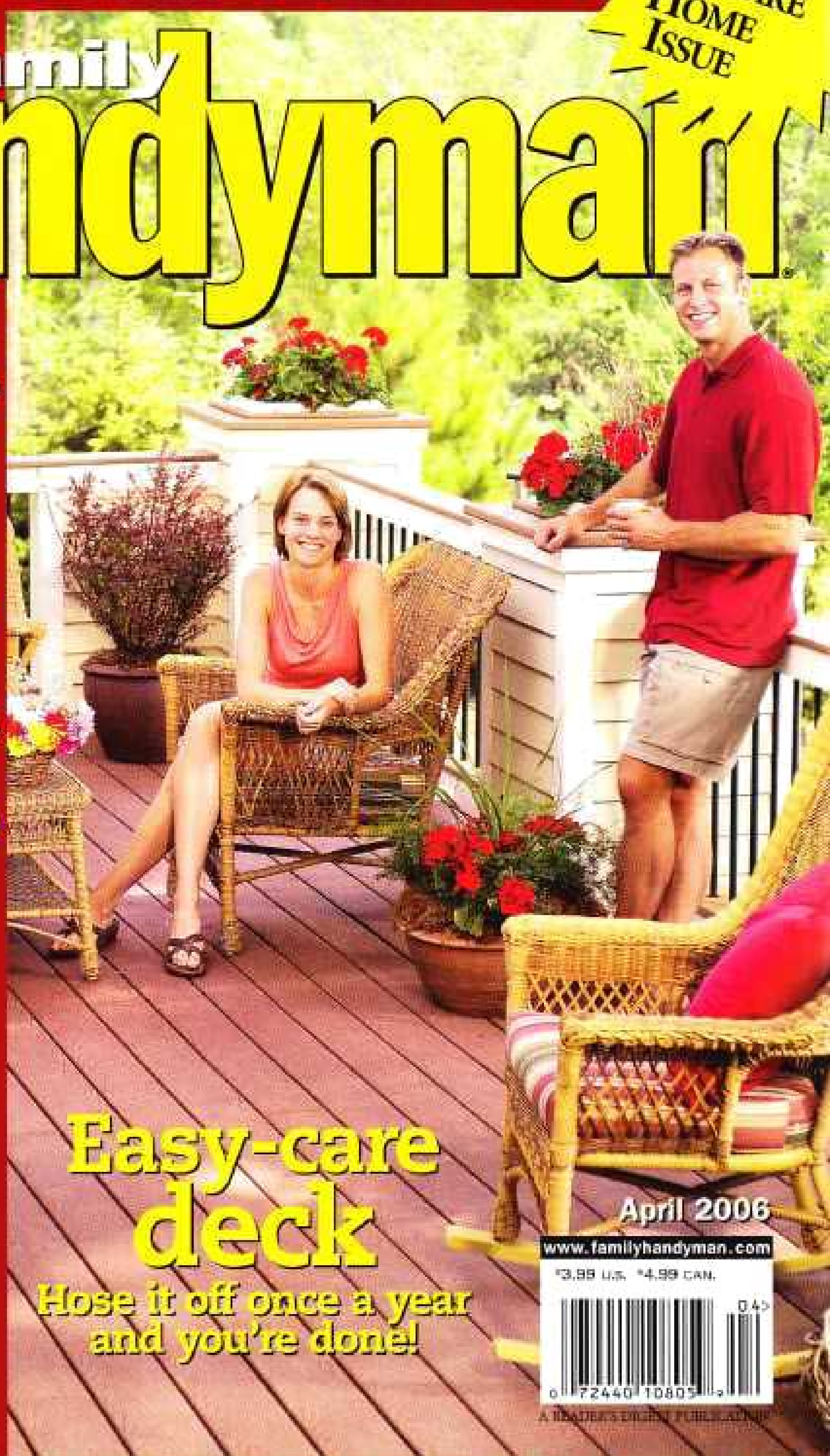
Enjoy a Low-Maintenance Home

Projects and products to cut your upkeep and give you more free time

THE EASY-CARE HOME ISSUE

The Family Handyman



Cut your outdoor chores!

House trim that wears like iron

5 Cures for tough lawn problems

New products that cut upkeep

No-maintenance deck railings

10 tips for fast vacuuming



Install leaf guards and never clean your gutters again! p.15

Easy-care deck

Hose it off once a year and you're done!

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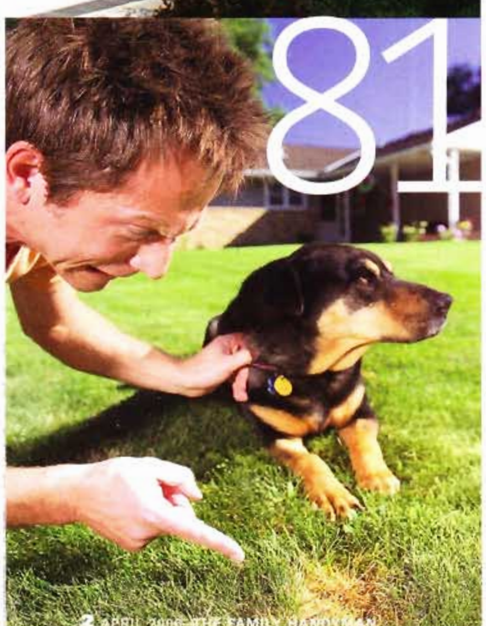
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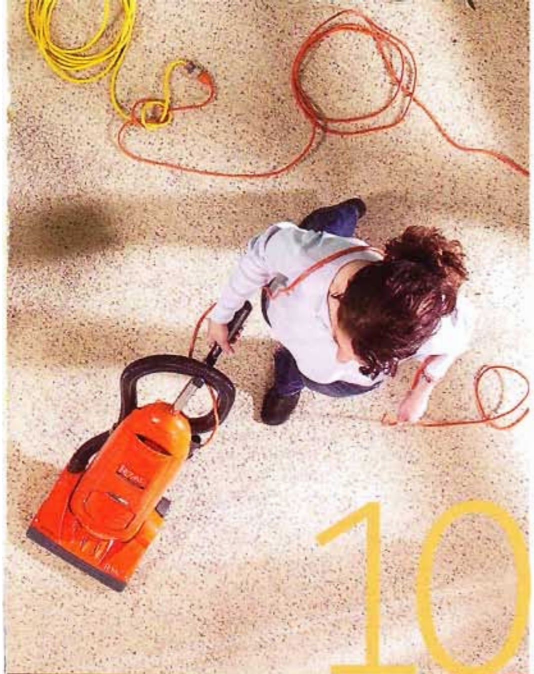


THE EASY-CARE HOME ISSUE

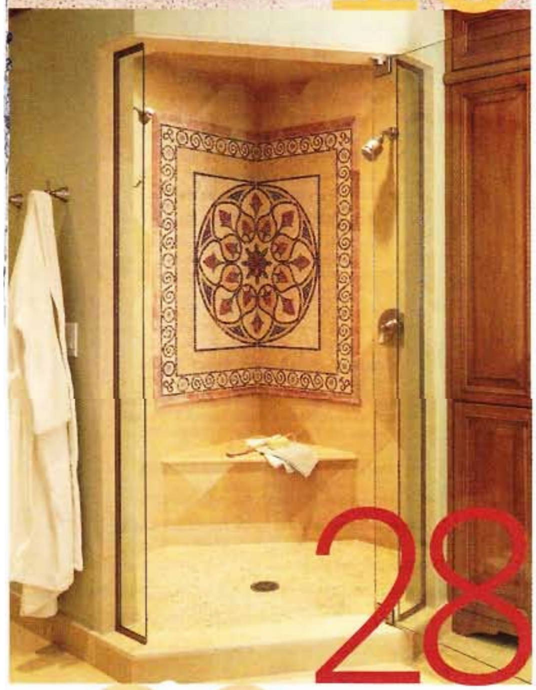




Departments









Cover Photos: Deck by Bill Zuehlke; gutter by Ramon Moreno

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HomeCare

TIPS, FIXES & GEAR FOR A TROUBLE-FREE HOME

10 tips from vacuum pros to clean carpet thoroughly & fast

You might think there's nothing more to vacuuming wall-to-wall carpet than running the machine across it. But folks who spend hours each day behind a vacuum know better. To stay in business, they have to do the job both effectively and efficiently. Here are some of their techniques for fast, thorough vacuuming:



Repair

AN EASY-CARE HOME ARTICLE

by Gary Wentz



4. Open blinds for better lighting

1. **Clear the floor first.** Picking up toys and other obstacles *before* you vacuum is faster than picking them up or shoving them around while you vacuum.

2. **Check the bag or filter.** A dirty filter or a bag that's more than three-quarters full can cut suction power by more than 50 percent.

3. **Set the height to match the carpet.** A too-high setting is ineffective; too low is bad for the carpet and the vacuum. To set the ideal height, raise the vacuum to its highest setting, turn it on and lower it until you can feel the vacuum trying to tug itself forward.

4. **Open blinds and switch on all the lights.** Ample light lets you see which areas are clean and which spots need a second pass.

5. **Plug in near your starting point,** not near the middle or end of the job. That way, the cord is always behind you instead of a constant obstacle in your path.

6. **Extend your range with an extension cord.** Stopping to plug into another outlet wastes time. Use a 14-gauge-wire cord; lighter cords (16- and 18-gauge) can lower the voltage supply and shorten the life of your vacuum.

7. **Run the cord over your shoulder** and around your back and hold it in your free hand. Do this, and you'll never run over the cord.

8. **Make one quick pass** over areas that get no foot traffic. In these spots, the vacuum only has to pick up surface dust.

9. **Go over traffic paths at least twice.** Two slow passes removes ground-in soil more effectively than several fast passes.

10. **Vacuum along baseboards** with a nozzle attachment every second or third time you vacuum.

Frequent vacuuming preserves carpet

If you read the care instructions for your carpet, you probably saw a statement like this: "Vacuum main traffic areas twice weekly. Vacuum lower-traffic areas once per week."

If you're like most people, however, you have ignored that advice. But manufacturers have good reason to recommend frequent vacuuming of traffic paths. Dirt particles are sharp and abrasive. When you walk across a dirty carpet, the particles grind against the yarn, leaving tiny scratches on the fibers. Those scratches dull the shiny fibers and change the sheen of the carpet. That's why the main pathways across carpet often appear duller than the rest of the carpet. Eventually, grinding dirt wears down the fibers too. Worn fibers mat down and stain more easily. Regular vacuuming reduces dirt and slows wear. But even the best vacuum can't suck out dirt that's lodged deep in carpet, so manufacturers also recommend deep cleaning with a "wet" method (such as steam or shampoo) every one to two years.

tip

About 80 percent of the dirt in carpet is brought inside on shoes. Well-swept sidewalks and steps, along with mats placed at entrances, can help keep dirt from ever reaching your carpet.

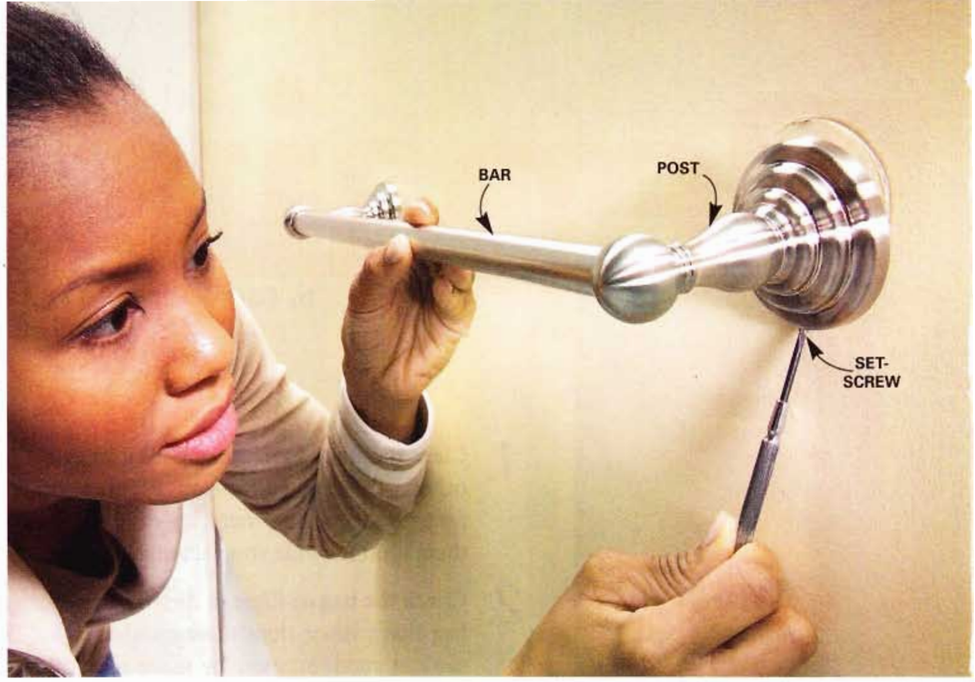
Permanent fix

Better anchors fix loose towel bars—forever

When towel bars come loose, it's usually because they weren't well fastened in the first place. The small, wimpy wall anchors included with most towel bar sets just don't have enough holding power. But with sturdy new anchors, you can remount towel bars so they'll never come loose again. Don't put off this fix. The longer you wait, the more likely you are to scar the wall or mar the bar's finish. You can also use these techniques to remount towel rings, toilet paper holders and hooks too. Everything you need is available at home centers and hardware stores.

First, remove the loose end posts (**top photo**). If one post is rock solid, leave it in place (chances are it's fastened to a wall stud). You'll need a hex wrench or mini screwdriver to loosen the setscrew. There's a slight chance that the existing anchors are adequate but the screws have loosened. So try to tighten the screws that hold the mounting plates in place. If they tighten up securely, just remount the posts and the bar. If they don't tighten firmly, remove the screws and the mounting plates. To remove the old anchors, pry them out with a screwdriver or poke them in and let them fall inside the wall. The next step depends on what kind of wall you have.

For fast, solid mounting on drywall, use E-Z Toggles (a pack of two costs $3). These clever anchors are self-drilling and have a T-clamp that folds out when you push the screw into the shaft. On tile, 1/4-in. tubular plastic anchors hold firmly, whether there's drywall or cement backer board behind the tile. Be sure to buy tube-shaped anchors as shown here ($2), not tapered anchors, which don't hold as well.



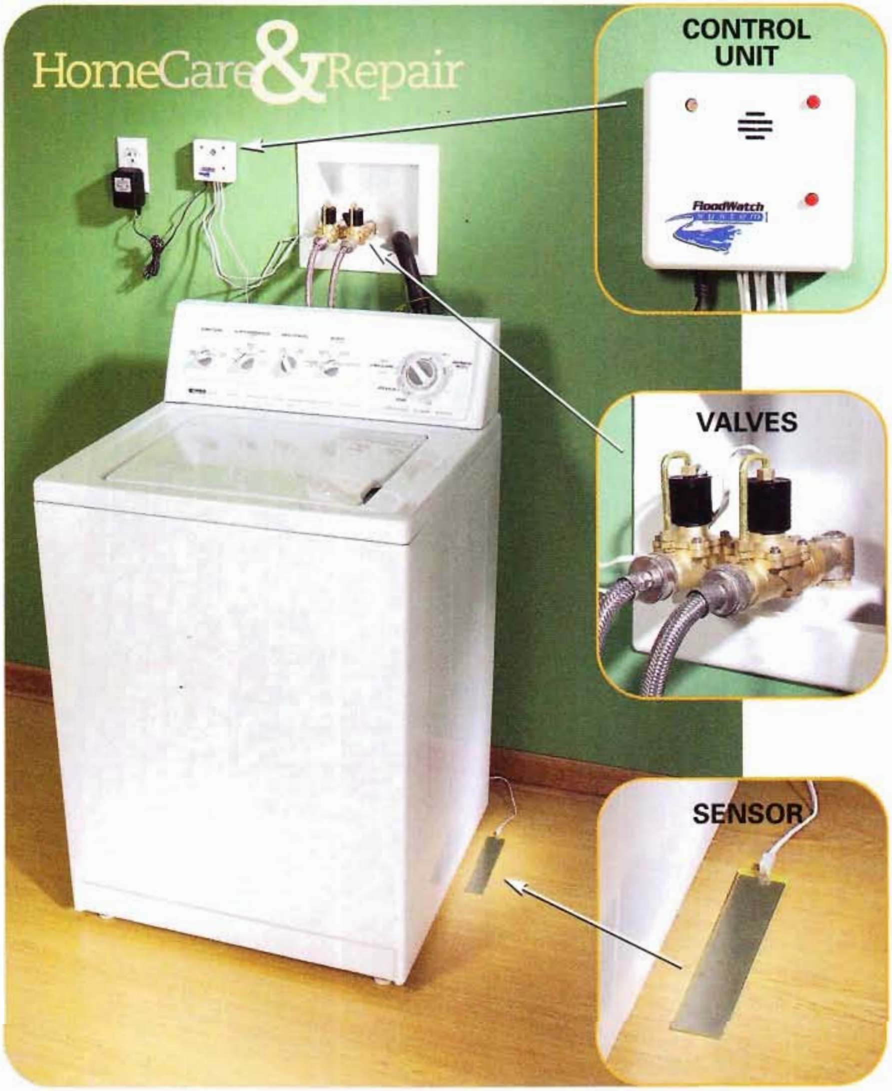
Loosen the setscrew that fastens the post to the mounting plate. Remove the post and the bar. Then unscrew the mounting plate from the wall and remove the old anchors.



Drive E-Z Toggles into the old anchor holes with a drill containing a No. 2 Phillips bit. Refasten the mounting plate with the long toggle screws. Then reinstall the post and the bar.



Enlarge the original anchor holes with a 1/4-in. carbide glass-and-tile bit ($5). Tap in 1/4-in. plastic anchors and fasten the mounting plate with screws.



Disaster prevention

Automatic valves prevent washing machine floods

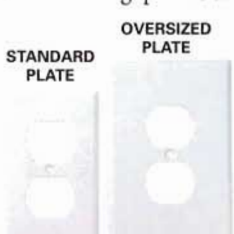
Water does more damage to homes every year than fire. And the washing machine is one common source of water catastrophes. When supply hoses rupture or valves inside the machine go bad, water flows freely until someone shuts it off. Several devices are available that shut off the water automatically. The one shown here, called FloodStop, costs about $90 and takes less than 10 minutes to install. Here's how it works: When the sensor detects water on the floor, it sends a signal to the control unit, which sounds a screeching alarm and automatically closes the valves.

To order FloodStop, go to www.smarthome.com (800-762-7846; item No. 7115). Shutoff systems for water heaters and other appliances are also available. To install the valves, you have to unscrew the supply hoses, so this is a good time to replace your old rubber hoses with safer, steel-sheathed hoses ($20 at home centers).

Instant fix

Oversize plates hide mistakes

When you're installing drywall or paneling, small mistakes can leave big gaps around electrical boxes. Luckily, there's a product made just for this situation. "Oversize" cover plates ($1) for switches and outlets are available in standard colors at home centers and hardware stores. They're 1/2 in. to 3/4 in. longer and wider than standard plates, so they can be a bit conspicuous. Electrical codes don't allow gaps wider than 1/8 in. around boxes, so fill gaps with joint compound or caulk before you screw on the cover plate.





Art Direction • LISA PAHL and BOB UNGAR
Photography • BILL ZUEHLKE

Ask TFH™

The Family Handyman

By Brett Martin

An Easy-Care Home Article



No more clogged gutters

Q The small leaves from the locust trees near my house really clog the gutters. Do those newer (and more expensive) types of gutter protectors such as Gutter Pro and Gutter Helmet really work?

Henry Johnson, via e-mail

A Solid guards, which cover all of the gutter except for a narrow crack to let the water through, do work well. The lip on the guards relies on surface tension to draw the water down into the gutter, while the solid covering deflects leaves and other debris that would otherwise drop in (**photo above**).

Gutter Topper, Gutter Helmut and Gutter Pro are examples of companies that make solid guard covers. Any of these should keep you from having to clean your gutters again. The guards work on every type of gutter, except plastic "C" shapes. Since the guards fit over the gutter rather than inside, they'll cover most standard-size gutters. They're typically attached to the gutter with brackets, with the upper edge slid under the lower shingles.

As you noted, these systems are expensive. You can't buy them at home centers. They're usually professionally installed, which explains part of the higher cost. (Look under "Gutters" in the Yellow Pages.)

Screened gutter guards, which are much less expensive and available at home centers, don't work as well. They'll keep out most leaves, but you can expect smaller debris, such as seeds and pine needles, to get through. Screens also make gutter cleaning more difficult, because you have to move them aside to get at the debris. However, in some cases they may be all you need.

No-tangle cord coiling

Q I've seen contractors store very long cords by doubling them up and somehow coiling them into a series of loops that come apart without tangling when it's time to use the cord again. We'd like to know how to do that.

Wayne and Martha Robbins, via e-mail

A If you're vexed by tangled cords, here's a great trick to learn. Start by holding both ends of the cord in your left hand. Grab the doubled cord with your right hand and fully extend both arms (**Photo 1**).

Make a loop with the doubled cord, then hold the loop in your left hand. Continue making loops until you're almost out of cord (**Photo 2**). If the cord isn't badly twisted or stiff, you shouldn't get any figure eights.

What you have left after making the loops will be the exact middle of the cord. Wrap this once or twice around the loops to secure them (**Photo 3**). Feed the middle back through the wrap to make a handle for easy carrying (**Photo 4**).



1 Hold the plug ends in your left hand and stretch the cord with your right hand.

2 Make a series of loops until you're almost out of cord.

3 Wrap the middle of the cord around the loops.

4 Insert the cord into the small loop that you just made. Pull the middle of the cord through the loop to make a handle.

Burrowing chipmunks

Q I have a problem with chipmunks burrowing around the stoop at the front entryway of my home. How can I keep the little critters from digging there again?

Kurt V. Meyer, via e-mail

A You're experiencing a common problem that's now occurring in the city as well as in the suburbs and rural areas. Chipmunks typically start their tunnels next to something solid, such as front steps or sidewalks, and burrow under it for protection.

To keep the critters out, bury a strip of hardware cloth 2 ft. deep in the ground around the steps and along the sidewalk. Chipmunks won't be able to get through it and they won't dig down far enough to get under it. You can buy 2-ft.-wide strips of hardware cloth at home centers, so you won't have to cut it.

If your chipmunk problem persists and they start to dig somewhere else on your property, simply catch them in live traps and relocate them away from residential areas.



Nonslip bathtub

Q Is there something I can apply to my tub and my shower stall to make them less slippery?

Lee Agon, Paso Robles, CA

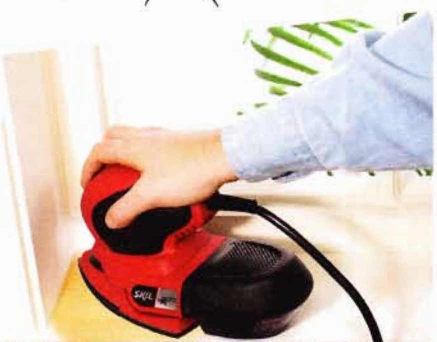
A We found a spray-on product called Johnny Grip that you can apply to shower stalls, bathtubs and tiles to create a nonslip surface. The product is ready to use out of the bottle and is applied with a handheld sprayer.

Johnny Grip can't be used on fiberglass, and it's not recommended for shiny wall tiles because it'll dull their appearance. A 16-oz. bottle, which will cover several showers and tubs, costs $35. Visit www.johnnygrip.com or www.nonslipfloor-products.com or call (866) 365-4747.

You can also hire a professional to apply other types of nonslip treatments, starting at about $40, depending on the size of the tub or shower. (Look under "Bathtub Repair" in your Yellow Pages.) These treatments are formulated for the particular surface, and some are guaranteed for life.

Or you can buy nonslip mats for your shower or tub. The mats self-adhere to the surface. They cost $7 and up. The drawback to the mats is that they usually become mold magnets if they're not cleaned regularly.









READER MYSTERY PHOTO



Speckled aluminum siding

Q We have black spots the size of flyspecks on our aluminum siding. The only way to remove them is by scraping with a metal tool, but that scrapes off the paint. I've tried several liquid solutions, but to no avail. How can I remove the spots?

Joseph Szilezy, Northampton, PA

A The spots are most likely "artillery fungus," also known as "shotgun fungus," so-called because of its ability to leap up to 20 ft. It's a wood-decay fungus that lives on moist landscape mulch and is especially common in the Eastern states, including Pennsylvania. The fungus is sensitive to light, so it's often found on white and light-colored surfaces, including siding and cars.

The fungus won't hurt your aluminum siding, nor will it degrade wood siding. The problem is wholly cosmetic. The bad news is the fungus is nearly impossible to remove and can leave a stain. If you own a pressure washer, try that first. Then try a cleaner specially formulated for removing mold and mildew, such as Soft Scrub (available in a 36-oz. bottle for $4.99 at Home Depot). Or make your own cleaner by mixing a solution of 30 percent vinegar and 70 percent water. Another home remedy is to mix 1/3 cup of powdered laundry detergent (such as Tide or Fab), 2/3 cup of powdered household cleaner (non-ammonia, such as Spic & Span or Soilax), 1 quart of liquid bleach and 1 gallon of water.

Test any solution in a small, inconspicuous area to make sure it doesn't discolor the siding. Apply the cleaner with a soft bristle brush, and rinse well. Start at the bottom and work up to avoid streaks. Be aware that these cleaners may not entirely remove the black spots.

When it comes to prevention, we don't know of any chemical treatment to stop the problem. If you spot the fungus, bag up all of the mulch around the house and take it to a landfill. Then put down a layer of black plastic and cover it with stones.

Art Direction • BOB UNGAR
Photography • BILL ZUEHLKE and RAMON MORENO

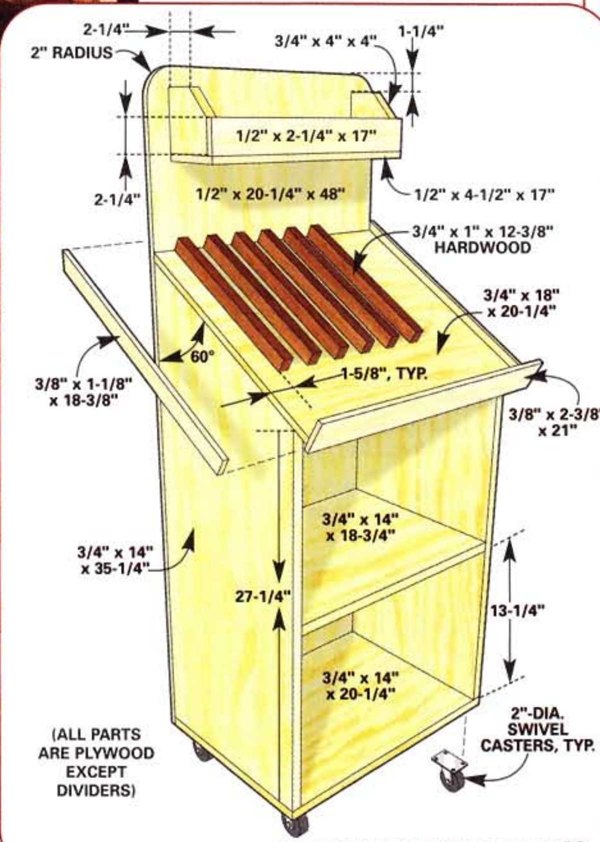
by Bruce Wiebe



Roll-around tool caddy

This simple workstation rolls right up to the job—anywhere in your work area. With your specialty tools organized and at your fingertips, you can concentrate on the project at hand. No more wandering around the shop gathering your materials.

We show the caddy configured for woodturning and ready to roll up to the lathe. If you're a gearhead, you could build it with a flat top with bins for sockets and wrenches, and shelves below for car supplies. If you're a woodworker, outfit it with planes, mallets and chisels. Whatever you use it for, when you're done for the day, you can just roll it out of the way. Thanks to Paul Marzen for this tip.

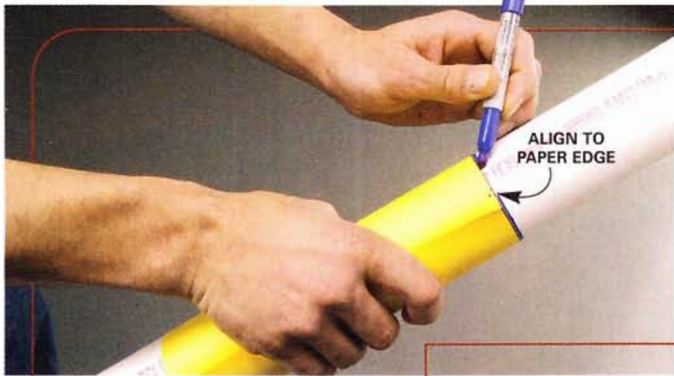


Cutting threaded rod

When you're shortening a bolt or threaded rod with a hacksaw, you always mangle the threads at the sawn end, making it difficult to get a nut threaded onto it. Reader Larry LeMasters' tip produces a much better ending. Thread two nuts onto the bolt at the cutoff spot, tighten them against each other, then saw against the shoulder to create a clean right-angled cut. Next, loosen the nuts and file a slight bevel around the end to clear burrs created by sawing. Then spin off the nuts to clean and realign the threads. Your shorter bolt will work just like a new one from the box.



If you have a shop tip you'd like to share, send it to tfhtips@readersdigest.com or Workshop Tips, The Family Handyman, 2915 Commers Drive, Suite 700, Eagan, MN 55121. We now pay $200 for tips we print. Original contributions become our property upon acceptance and payment. We're sorry, but tips can't be returned.





Right-angled cuts on pipes

Scratching your head over how to mark a cutting line all the way around a cylindrical workpiece? No problem, thanks to another great tip from Larry LeMasters. Measure and mark the cutoff location on the front and back sides of the cylinder, then wrap a sheet of construction paper around the cylinder, aligning the paper edge with both marks. Next trace the cutting line, then saw along that line to create a square-cut end.

Easy-to-read marks on your projects

Have you ever used a pencil to mark dark wood and then been unable to find your mark? Or made indents that took extra time to sand away? Kurt Lawton uses white chalk to mark parts. This technique comes in handy when you're marking parts from a cutting list or marking grain matches for a glue-up project. The chalk sands away easily in seconds without leaving an indentation. But don't use colored chalk or you may have trouble getting the pigment out of the pores.

Editor • TRAVIS LARSON
Art Direction • LISA PAHL and EVANGELINE EKBERG
Photography • MIKE KRIVIT
Illustration • BRUCE KIEFFER



Occupancy detector

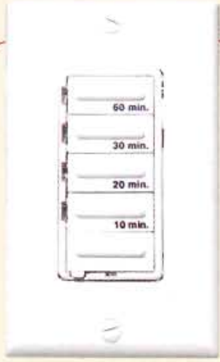
In rooms that you often enter with your arms full, like the kitchen or laundry room, it's handy to have the light come on automatically when you enter. No one around? It turns off the light and saves on those energy bills.

Featured switch: Leviton PR180 ($20)

New electronic switches make life (a little) more convenient

by Travis Larson

Hi-Tech Solutions



Timer switches

This class of switches is perfect for lights or fans that you'd like to leave on for a set amount of time. Bathroom heat lamps and exhaust fans are perfect candidates. Push the 10-minute button and the bathroom fan will turn itself off in 10 minutes—long enough to clear out the moisture after a shower, for example.

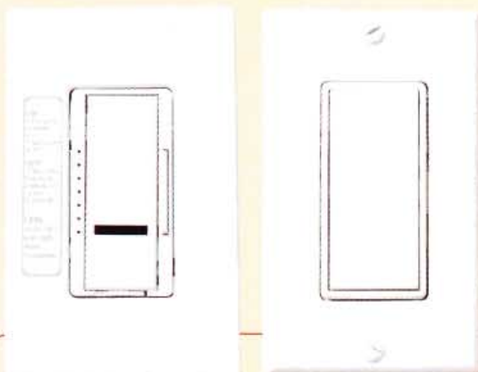
Featured switch: Leviton 6560M ($42)



Programmable timer switches

Would you like some lights to turn on and off at certain times? Say you'd like to schedule your outdoor lights to come on at 6 in the evening and shut off at 10 that night. It's simple with a programmable switch. This switch can be separately programmed for every day of the week.

Featured switch: Intermatic EJ500C ($33)



Three-way dimmers

This new electronic three-way dimmer system calls for a main dimmer that works in conjunction with a "slave" dimmer at the second switch location. The slave and main dimmer switches use radio signals to let each one know what the other is up to.

Switch models, both by Leviton: Main Switch, TPI06 ($38); Slave Switch, MS00R-10W ($30)



Remote-controlled dimmer

Keep the remote by your bedside, favorite movie-lounging spot or near the dining room table. No more climbing out of bed to turn off the lights when you're ready for a little shuteye; just reach for the remote!

Featured switch: Lutron MIR-600-THW ($53)



Buyer's Guide

INTERMATIC: (815) 675-7000. www.intermatic.com
LEVITON: (718) 229-4040. www.leviton.com
LUTRON: (888) 588-7661. www.Lutron.com

Say "so long" to at least some of your old light switches and mechanical timers. Ever-shrinking and smarter microelectronics containing "embedded intelligence" can help you save a bit on energy costs, but more important, they'll add convenience. The ones featured here don't require you to add wires within the walls; you just have to replace the old switches with new electronic ones. All of these switches can be controlled manually at the switch as well.

A clumsy, finicky, hard-to-program mechanical timer can be replaced with an electronic one that even has an internal atomic clock that resets itself after power outages. Lights on old three-way switches were impossible to dim from more than one location—no longer true. Replace a mechanical-dial shutoff timer switch with a new unit that has preset intervals so that with the touch of a button, you can decide how long a bath fan or other fixture will run. And when you enter a room with your hands full, let a new electronic occupancy sensor (opposite page) turn on the lights—and turn them off again when you leave.

Home centers carry a version of most of the switches shown here. But for the widest selection, go to the manufacturers' Web sites listed above.

Art Direction • DAVID SIMPSON
Photography • RAMON MORENO



A spacious corner shower—complete with tile medallion—includes a fixed shower head on the right and an adjustable handset on the left (detail, p. 36).

A Bathroom Reborn in Stone

A marble mosaic and stately limestone transform this bath from staid to sumptuous

by Spike Carlsen

Enter the bathroom of this suburban Minneapolis home and you'll find stone ranging in size from 5/8-in. flecks to 500-lb. slabs. It's installed on the ceiling, walls and floors; used as baseboard molding, shower seat and backsplash; laid in herringbone, mosaic and diagonal patterns; tumbled, polished and honed. It's a testament to the versatility, workability and beauty of stone as a building product.

But simply including tons of stone does not an elegant bathroom make: The stone, indeed the entire project, must be thoughtfully designed and installed.



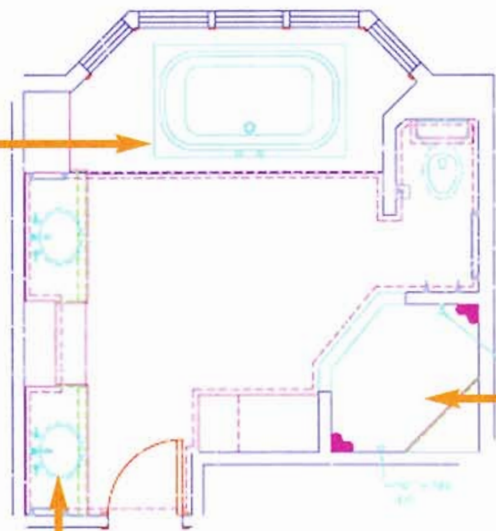
Open shelving and two vanities, each with eight drawers, provide ample storage space.

Plan overview

the shower area

the whirlpool bath area





SCALE: 1/4" EQUALS APPROX. 18"



the vanity area





Problem Solver

High tile meets short carpet. Tile needs to be installed over a solid base, and that base can range in thickness from 1/4-in. backer board to the 1-in.-thick "mud pack" used in this project. Add 1/2-in.-thick tile to that and you have a bathroom floor that stands toe-stubbing height above the abutting carpet. In many cases a beveled threshold can ease the transition, but to make up the 1-1/2-in. height difference in this project, the tile installer laid a 3-in.-wide strip of tile at a slight incline.

Building Materials

Gentle cleaning for stone. Porous stone, such as limestone, slate and marble, can be irreversibly harmed by even ordinary cleaning products. Acidic cleaners can etch and dull natural stone surfaces and damage the grout as well. Most installers and manufacturers suggest sealing the tiles, then using only warm water or products formulated specifically for stone.

Three Unique Areas— One Unifying Material

Bathrooms can be broken down into "work zones," similar to the way kitchens often are. And while each space can be self-contained and have unique elements, all must mesh visually and functionally in order for the room to look and work right.

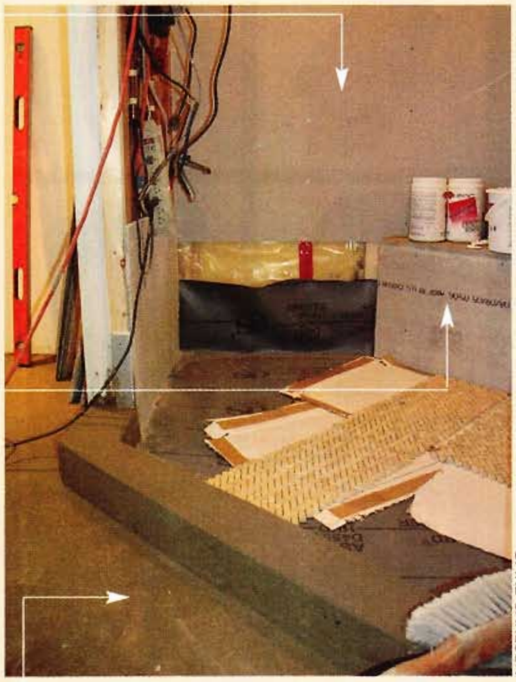
In this bathroom, stone works as the underlying theme to unify three unique spaces. The shower area features a mosaic marble mural surrounded by honed marble tile for the walls, ceiling, floor and seat. The whirlpool bath area, tucked into a bay window, uses a slab of honed limestone for the deck as well as the backsplash along the walls. The vanity countertops are likewise crafted from limestone, with a slab of polished granite nested between the two to serve as the makeup tabletop.

The 16 x 16-in. honed marble floor tile, band of baseboard tile and crown molding help tie all the spaces—including the partitioned-off commode area—into a single elegant space. All the stone, with the exception of the granite slab, is either tumbled or honed for a simple yet rich look.

Built to last

Choose the right tile underlayment

Tile is remarkably durable. It's what's beneath it and the way the tile is installed that make the real difference. Three different types of tile bases or underlayments were used in this bathroom. Here's what was used where and why:



SPIKE CARLSEN

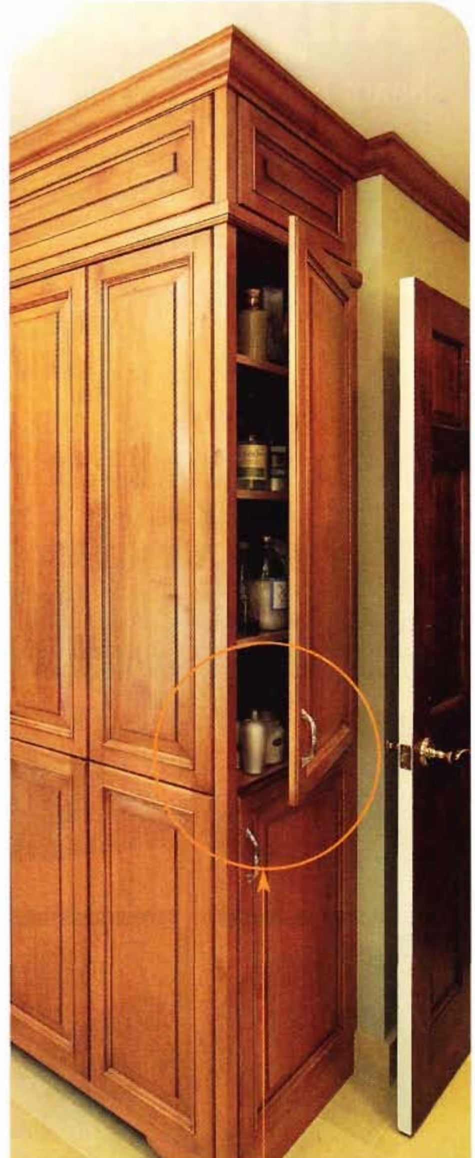
DensShield

DensShield—a relatively new material that looks like, cuts like and installs like drywall—was used for the upper shower walls and shower ceiling. The waterproof core resists water and swelling.

Cement Board

Cement board was used for the shower seat and lower 2 ft. of the shower enclosure. The tile contractor preferred using cement board—a tried-and-true standby—to using one of the newer products in areas subject to intense moisture or standing water.

Dry-Tamped Base, a stiff, sand/mortar mix packed over metal lath, was used on all floors and the shower curb. A tamped base was also used to pitch the shower floor toward the drain from all directions.



Elegant solution

Easy-access cabinet. With four children, the homeowners found their private master bathroom often being invaded by kids coming in to grab shampoo and other supplies. The solution? They put an access door in the side of the cabinet right by the door, so the kids can grab what they need without traipsing through the main bathroom.



PHOTO COURTESY OF HOMEOWNER



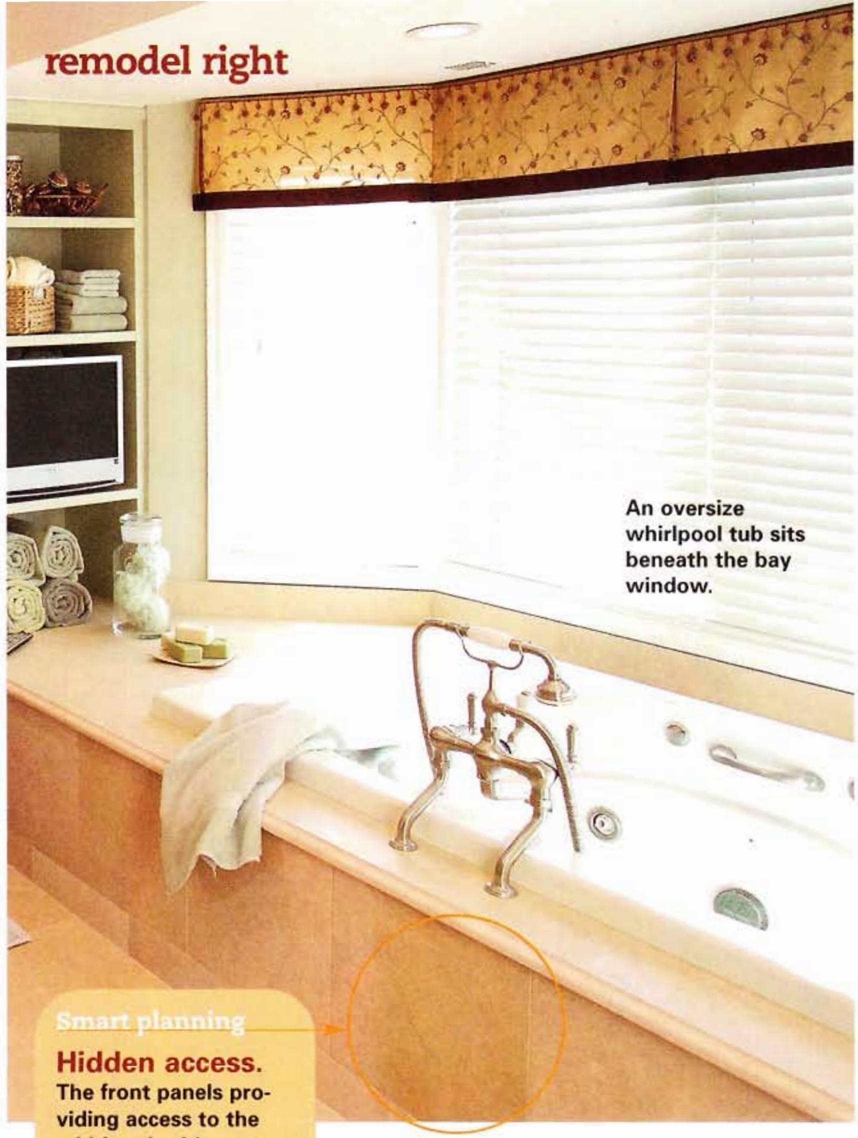
SPIKE CARLSEN

Working with contractors

Hire your designer to coordinate. Many construction-related problems stem from misunderstandings between all of the parties involved—homeowners, designers, general contractors, building officials and subcontractors. To streamline the decision-making process and clear up any questions of accountability, designer Pat Undlin also served as construction coordinator. It involved more visits to the job site, but the project turned out exactly as planned.

Preventing problems

Minimize the mess. Before demolition began, the general contractor installed temporary plastic floor runners between the upstairs bathroom and the front door, and protected the wood stair spindles and newel posts with heavy cardboard. This prep work can save thousands of dollars in repair and cleanup costs at the end of the project.



An oversize whirlpool tub sits beneath the bay window.

Smart planning

Hidden access.
The front panels providing access to the whirlpool tub's motor and plumbing were designed to be the same size, and fall into the same position, as the wall tiles, making the doors nearly invisible.



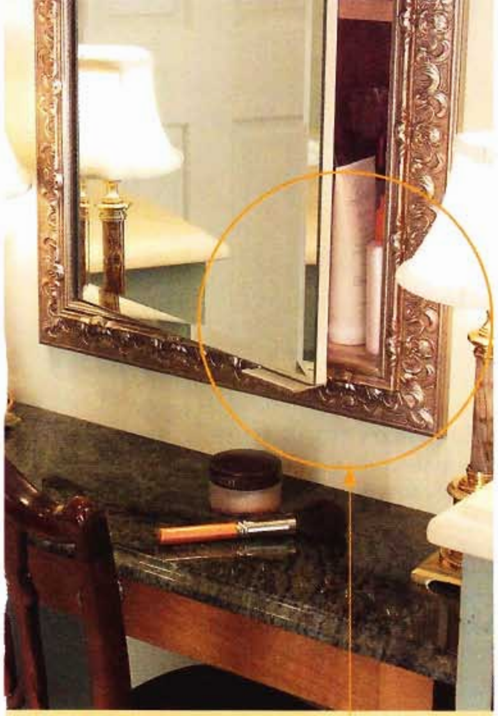
SARA KOEHLER

An Old World Look with New Materials

Interior designers Maureen Haggerty, Pat Undlin and Heather Zappo of Pappas Inc. collaborated with the homeowners to create a room with an underlying "Old World" feel. This was partially accomplished in the selection of lighting and plumbing fixtures. The fabrics, paints and accessories used in the space helped reinforce the theme. Elements that might have fought with the feel were kept simple; sinks are undermounted, the oval tub is white and elegantly simple, and recessed lights are unobtrusive and disappear into the ceiling.

"We avoided saturating the space with Old World elements," says Pat. "Our goal was to respond to the homeowners' request for adequate lighting and practical storage to support how they live—within the context of a modern bathroom with classic overtones."

The cabinets are made of alder, a wood that accepts paint, stain and clear finishes smoothly and evenly. The vanity cabinets were given an aged look through a lengthy process that involved distressing the wood with ice picks and chains, hand



Elegant solution

A perfect makeup area (with perfect storage). **When the homeowner revealed she had to sit on the vanity in the existing bathroom to get close enough to the mirror to apply makeup, the design team decided to bring the mirror to the homeowner. In the new bathroom, the large mirror, set only 10 in. back from the front of the built-in makeup table, provides the needed proximity. A candlestick lamp on each side provide the side lighting, and the mirror—while having a built-in look—cleverly disguises a close-at-hand storage space behind its swinging door.**

Open storage nooks incorporated into the "dead space" behind the storage cabinet (p. 29) are accessible from the vanity areas on each side.

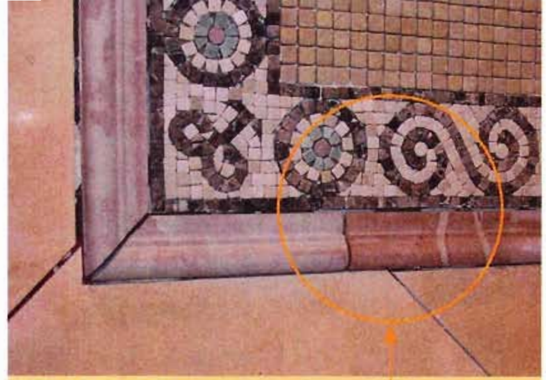
sanding, sealing the wood followed by more hand sanding, applying coats of paint and glaze, then wiping and rubbing them off to highlight the distressed areas and recesses, all topped off with several coats of clear lacquer. The vertical storage cabinet was finished with multiple coats of a pigmented catalyzed lacquer.

All colors and materials—right down to the fabric on the dressing table chair—were selected before the project began. "When we design a project we believe everything in it should look intentional," muses Pat. "If you have a detailed plan and execute it exactly, you'll get precisely the aesthetic and function you want."

Designing with Tile Murals

Whether it's a fruit basket above the stove or a Monet water lily in the shower, murals do one thing exceptionally well: create an interesting focal point. To make certain the mural does just that, consider these design tips:

- **Determine the ideal position for your mural, then design the rest of the tile pattern around it. Draw it out in detail on paper so you can shift the layout in order to avoid small or awkwardly shaped tile pieces where they abut the mural, floor or corners.**
- **Set the wall mural apart from the field tiles by framing it. This can be done with single or multiple borders made of tile, or with special contoured pieces often used for edging countertops or creating chair rails.**
- **Multiple murals, murals disproportionate to the size of the space or overly elaborate borders that overpower the mural can distract from the focal point you're trying to create. This is clearly an area where "less is more."**



SARA KOEHLER

Problem Solver

When tile colors don't match. **The tiles used for the main wall, the mural and the frame surrounding it came from different quarries. This, coupled with the fact that stone is a natural product with less-than-predictable coloration, resulted in tile hues that didn't quite match. To solve the problem, the border tiles were treated with a color-enhancing sealer to even out the color and push it closer to that of the mosaic tiles.**

Smart shopping

A mural for every budget.

A variety of companies offer murals and medallions for those looking to add a special touch. The design can range from geometric to pictorial, the subject matter from aquatic to classic art reproductions, the material from stone to glass and ceramic. By using digital photography and heat-activated dyes, murals can also be custom-made from your own photo at a reasonable price.

The shower mural in this remodeling project was supplied by Daltile, a company that offers a variety of basic tile medallion patterns and an option that allows designers and homeowners to specify their own color combinations. The 36 x 36-in. central medallion cost about $1,800; the frame and border pieces added $1,000. The time from order to delivery was five weeks.

Other sources include:

Pacifica Tile Art Studio (www.pacificatileart.com, 800-450-7108), specializes in standard and custom tile murals.

BareFootFloor.com (www.barefootfloor.com) offers more than 140 tile mosaic patterns ranging in price from $500 to $1,500, in a wide variety of shapes and sizes.

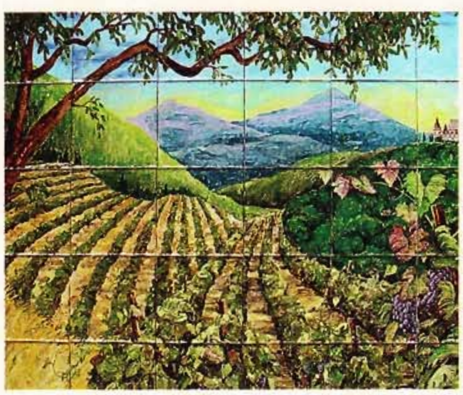
Alicia Tapp Designs (www. aliciatappdesigns.com) specializes in tile murals, many based on classic art, with categories that include animals, Egyptian art, the art of Gustav Klimt and details from the Sistene Chapel.

Pallas Design (www. pallasdesigns.com, 888-694-8302) Murals on marble, stone and ceramic tile.



PALLAS DESIGN

Fruit by Alphonse Mucha on tumbled marble (Pallas Design)



TILES BY MIMI

For custom designed and hand-painted murals like the one above, called Vineyard View, check out Tiles by Mimi (509-455-8246, www.tilesbymimi.com). The prices range from $200 to $250 per sq. ft.

Products

Mosaic medallion: La Flora Mosaic Stone Medallion, Natural Stone Collection, Daltile, www.daltile.com. Border tiles also by Daltile.

Sinks: Kohler, Caxton No. K-2211-0, white. www.kohler.com.

Sink faucets: Rohl, Perrin & Rowe U.3720L, satin nickel finish. www.rohlhome.com.

Tub: Jason BY635 Brittany whirlpool bath. (www.jasonint.com)

Tub faucet and hand shower: Rohl, Perrin & Rowe U3500L/1LS in satin nickel.

Vanity tops and tub deck: Antique gold limestone with honed finish and ogee edge.

Makeup countertop: Verde Maritaka granite.

Tile for floor, shower walls and ceiling: Antique Gold marble, honed finish, Yiftah marble.

Valance fabric: Kravet, No. 26520-4 (www.kravet.com).

Sconces: Minka Lavery No. C5961-128 with Visage Crackle finish and glass (finish altered locally by cabinet finishers). lightingcenter.com

Cabinet pulls: Classic Brass. St. Georges Collection No. 1404-SN, satin nickel finish. eclectic-ware.com



Handheld shower: Rohl, Country Bath No. 1310, satin nickel; fixed shower arm and head on opposite wall: Hansgrohe No. 27411-821 and No. 28496-821, satin nickel; valve handles and trim: Rohl, Perrin & Rowe, U1000L, satin nickel.



Ceiling fixture: Murray Feiss No. SF165 BGD, Brulee Gold.

Art Direction • SARA KOEHLER
Photography • MIKE KRIVIT EXCEPT WHERE NOTED
Design • PAPPAS INC., MINNEAPOLIS (www.pappas.biz)
General Contractor • FEY'S CONSTRUCTION INC., MINNEAPOLIS
Tile Contractor • CLAY BORNE CO., PLYMOUTH, MN

Easy-care

by David Radtke



When a deck is inviting, you know it, and here's one that will definitely draw you outdoors. It's spacious and attractive. It features large planters to put green plants and flowers close at hand. And it has a versatile railing system that lets you combine solid panels for privacy and open sections for great views and cooling breezes.

We framed the deck with pressure-treated wood, which will last for decades, and then covered the framing with plastic/wood composite decking and an engineered wood trim, aluminum balusters and fiber cement siding (more on these later). With these materials, your deck will look great for a decade with little more than an occasional cleaning.

In this article, we'll show you in detail how to build the unique features of the deck: the planters and the railings. We won't go into as much detail on the framing, although the drawings provide all the necessary details for you to complete the project.

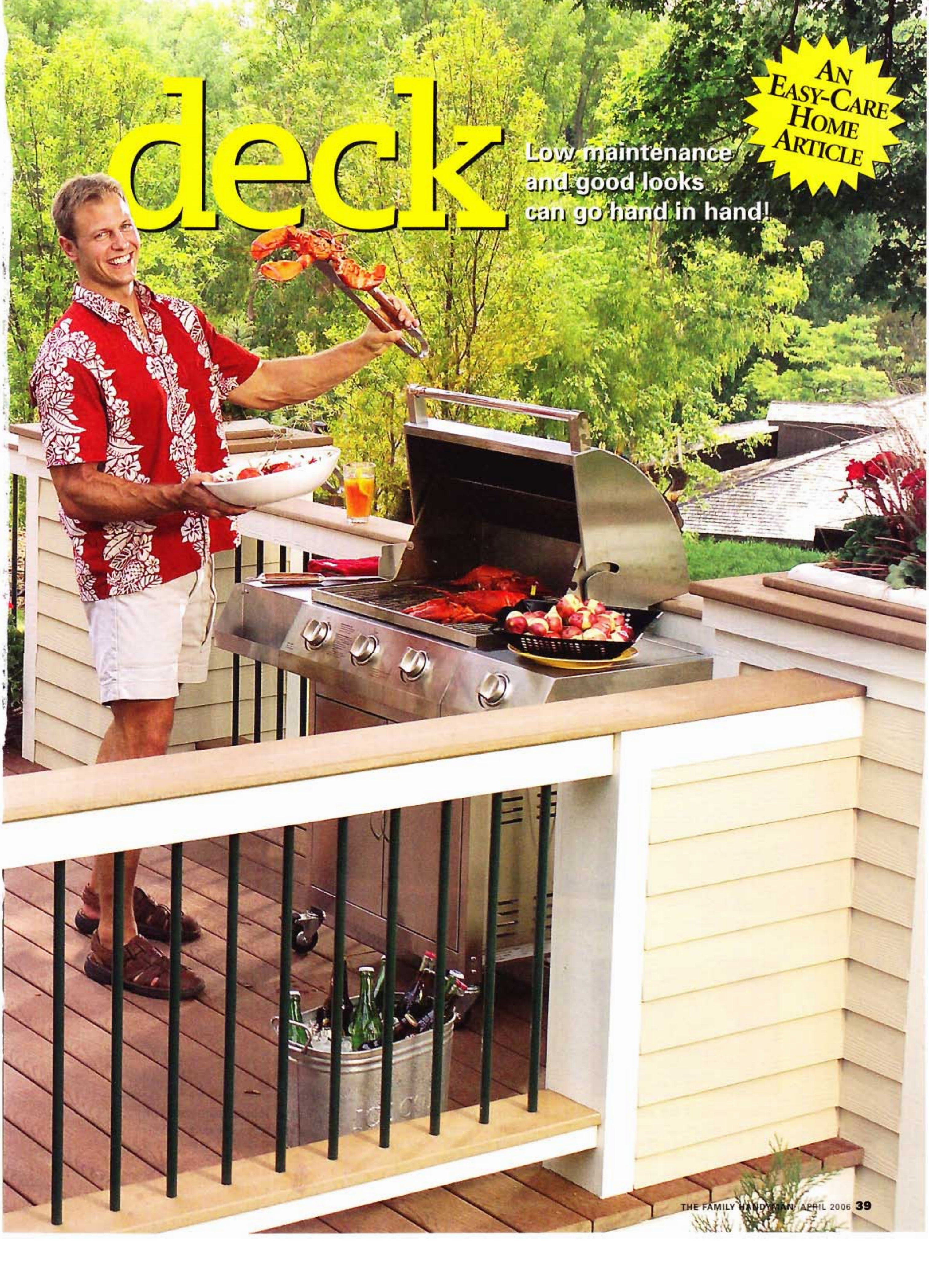
A deck project of this size is an entire summer commitment, so geting the planning done now will give you more time to enjoy it later in the season. Despite its size, the project is no more difficult than an average deck, so if you're an intermediate do-it-yourselfer, you'll be able to tackle it.

Low-maintenance materials come with a higher price tag (about 30 percent more than wood), but the extra years of service more than offset the difference. We paid about $7,500 for the materials for this 12 x 30-ft. deck.

deck

Low maintenance and good looks can go hand in hand!

An Easy-Care Home Article



Key low-maintenance materials

For the decking, we chose Trex, one of the many composite materials available. A big advantage is that it's available in standard decking sizes (2x6 and 5/4 x 6) as well as in 3/4-in.-thick boards that work well for outdoor trim. We used it on all the weather-vulnerable horizontal surfaces, including the rail and caps, since it's virtually unaffected by water.

For the trim pieces where we wanted to add color with paint, we used an engineered composite called Miratec (one of several similar products). It's highly water resistant and can be cut and nailed just like wood.

And for the lap siding on the planters and the panels we chose fiber cement, a product now widely available. It's heavy but it won't rot, and it holds paint extremely well. You'll be able to find this and the other products at your local lumberyard and home center.



Aluminum balusters
Cut these factory-painted tubes to length and install them into the rails.





Fiber cement lap siding
This preprimed siding is impervious to rot and decay and holds paint like a magnet.



Decking, rails and caps
Durable all-weather composite decking and boards are used on all flat surfaces.



Engineered sidewall trim
Engineered wood composites cut and nail easily and stand up to the weather.

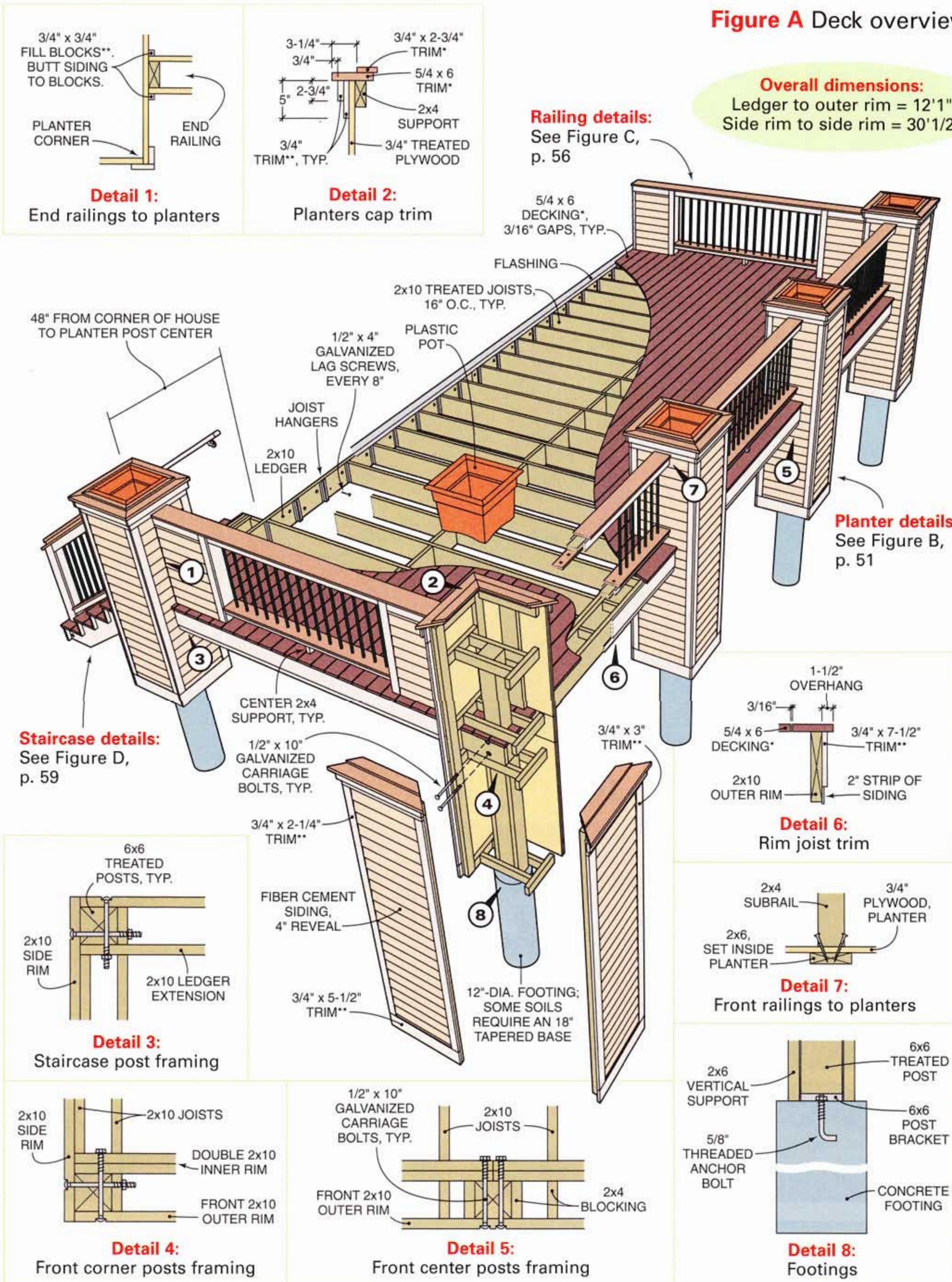
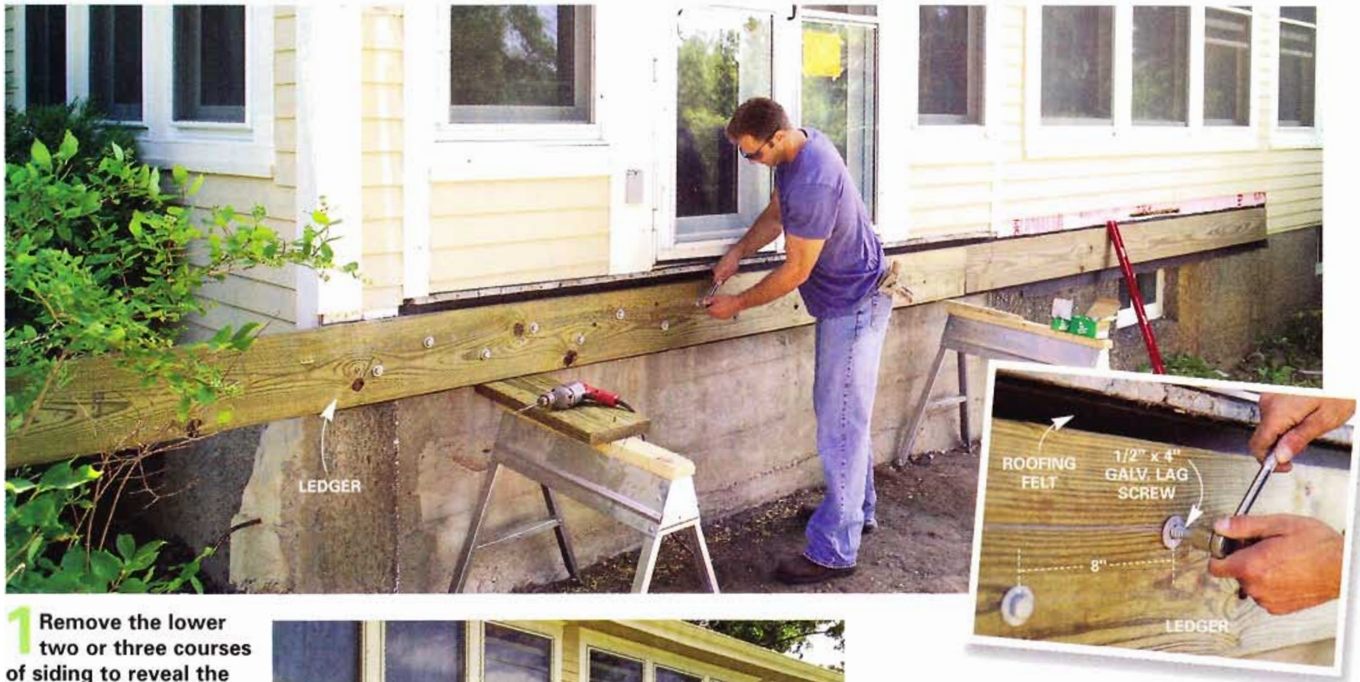
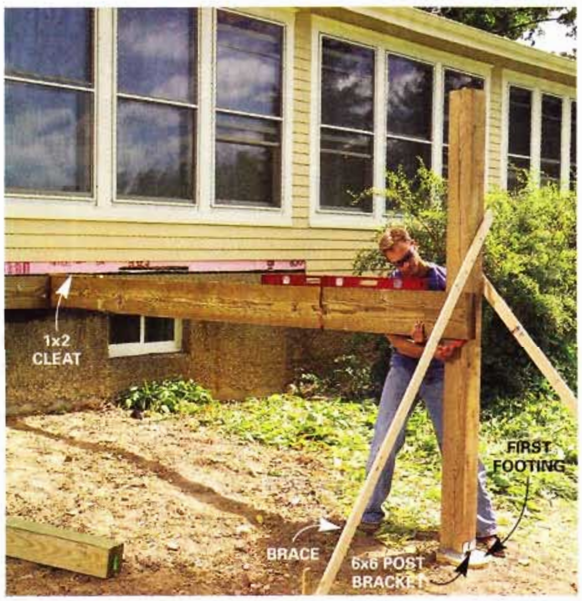


Figure A Deck overview

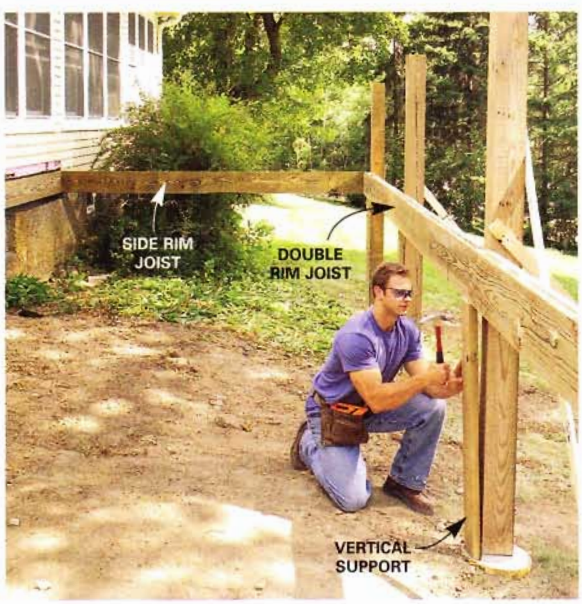
*TREX OR SIMILAR COMPOSITE **MIRATEC OR SIMILAR ENGINEERED WOOD PRODUCT



1 Remove the lower two or three courses of siding to reveal the rim joist of the house, then measure the length of the ledger. Fasten the ledger to the rim joist with 1/2-in. x 4-in. galvanized lag screws.



2 Lay out the post positions with string lines and pour the footings. Anchor and brace the posts. Screw a cleat to one end of an uncut joist, lay it on the ledger, level it, and mark the top and bottom joist heights onto each post.



3 Nail the double rim joist and the side rim joists to the posts. Then cut and nail 2x6 vertical supports below the outer rim (see Figure A).

A good plan will save you time and money

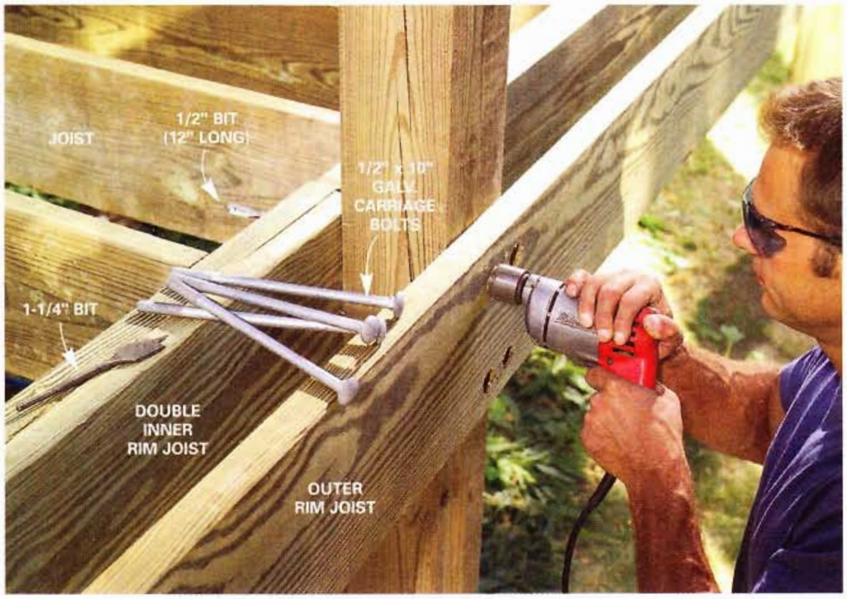
You'll no doubt have to modify our deck plans to fit your house, so here are some things to consider along with other planning issues:

- Sketch your house with your window and door locations as well as your lot lines so you'll be able to adapt the deck size.
- Consider the location of the stairway. You may need to change it to the side or even the front.
- Take a detailed sketch of your plan, including all the structural information, to your local building department for a permit, and be sure to get your underground utilities marked before digging.
- Lumberyards may need to special-order some materials like composite decking or balusters (see Buyer's Guide, p. 58), so check with your supplier at least three weeks before you plan to build.

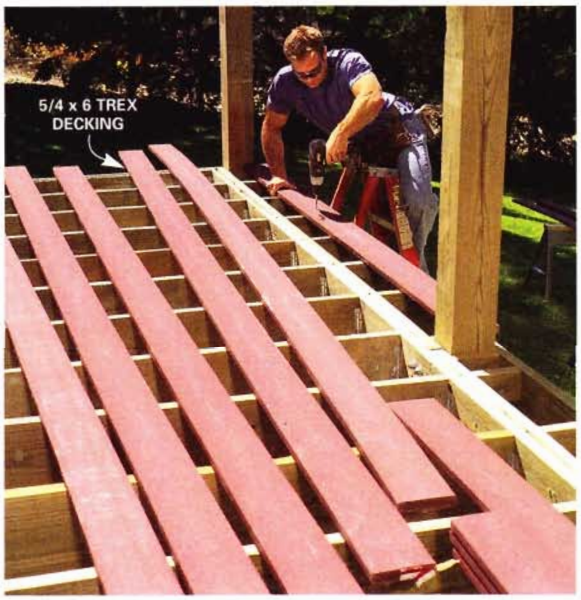
Dig and lay out the footings

You'll need to lay out the concrete footings and anchors (**Figure A**) precisely, because the posts that attach to the footings are an integral part of the railing above. Measure out from the house 140-3/4 in. in two spots and run a string line exactly parallel to the house. The first footing location (**Photo 2**) must be square with the house along this line, so use the 3-4-5 triangle method to triangulate it precisely.

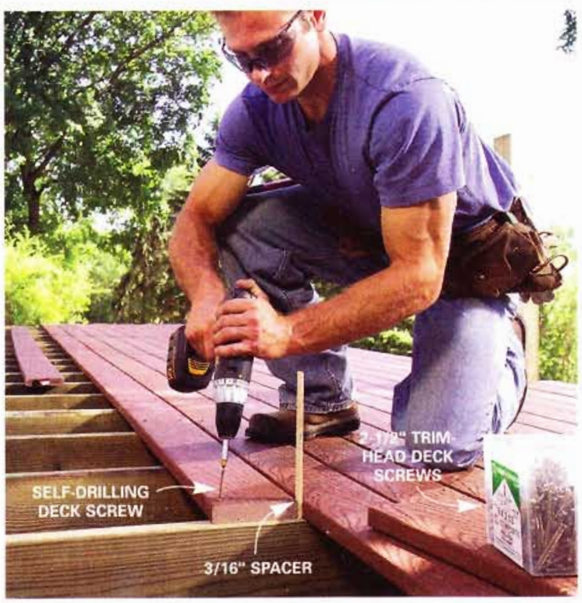
- Stake the location of the center of the first footing and then measure along



4 Nail up the joists using joist hangers. Then tack the outer rim joist even with the inner rim joist and drill a recess and a clearance hole for the 1/2-in. x 10-in. galvanized carriage bolts. Insert and tighten the bolts.



5 Screw the decking to the tops of the joists, leaving a 1-1/2-in. overhang on the front and sides. Use special self-drilling trim screws (see Buyer's Guide).



6 Snap lines every 3 ft. as guidelines to make sure the decking courses run straight. Cut 3/16-in.-thick spacers for accurate spacing and stagger end joints.

your string to locate the centers of the others. Keep the measurements an equal distance from each other for uniform railing sections.

- If you locate the stairs at the same spot we did, make sure the post adjacent to the stairway aligns with the house (**Figure A, Detail 3**), so you can attach the ledger to it.
- The design requires accurate positioning of the posts, so double-check your measurements to make sure they're square and parallel. If a utility marker shows that an electrical, phone or gas line is in the way, revise your layout.
- Consider renting a power auger to dig the footings to frost depth. Make the hole a bit wider at the bottom for a solid base. Once the holes are dug and inspected, mix the concrete in a tub and fill each hole. Our holes required about six 80-lb. bags of concrete mix each. Use short sections of Sonotubes (12-in.-diameter cardboard tubes) to form the tops of the footings a few inches above grade. Before the concrete hardens, add a 1/2-in.-diameter anchor bolt at the center of the footing with 1 in. of the threads exposed. Let the concrete set for two days before you set the posts (**Photo 2**).

Attach the ledger and set the posts

The ledger supports half the weight of the deck, so be sure to anchor it with 1/2-in. x 4-in. galvanized lag screws every 8 in.

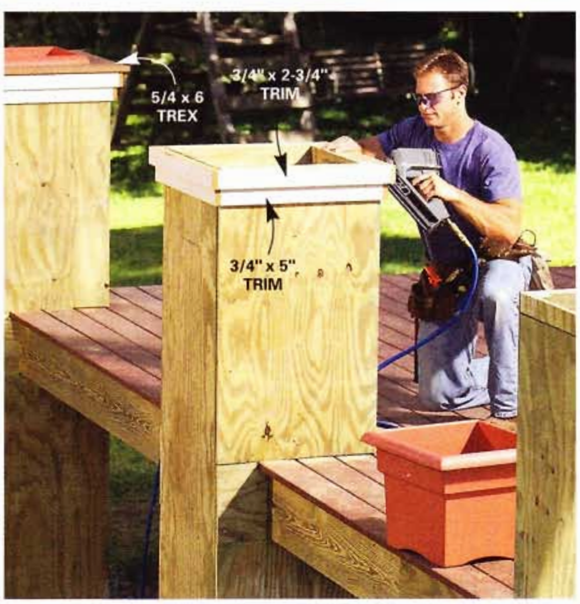
- First check the condition of the rim joist on the house (**Photo 1**) to make sure it's rot free.
- Cut 12-in.-wide strips of No. 15 roofing felt and staple them to the house rim. Tack the 2x10 treated ledger into place with 16d nails and then mark the joist layout on the ledger.
- Drill pilot holes for your lag screws so they won't interfere with your joist layout, then drive the lag screws.
- Bolt the galvanized steel post brackets to the anchor bolts at the top of the footings. Stretch a string parallel to the house again so you can perfectly align the post anchors.
- Lift the 6x6 treated posts onto each post anchor and nail temporary braces onto the post. Screw the base of the post into the anchor, and plumb the posts by driving stakes into the ground and screwing the braces from the post to the stake (**Photo 2**).



7 Cut the posts to length. Then screw the 2x4 outriggers to each post (Figure B, p. 51). Build the outer planter walls from 2x4s and 3/4-in. plywood and screw them to the outriggers.



8 Build the inner planter walls in two short sections and screw them to the outriggers. Then screw 3/4-in. plywood side panels into place to enclose the planters.



9 Trim the top sides of the planters with 3/4-in.-thick Miratec composite boards and cap the planters with 5/4 x 6 Trex decking screwed to the trim.

Install the joists

Now you'll want to mark the inner rim joist location onto the posts (**Photo 2**). This can be tricky, so to make the job easier, cut a 6-in. piece of 1x2 and screw it to the top of a joist, leaving 1-1/2 in. protruding. Now you can rest this cleat atop the ledger while you mark the rim joist locations on each post.

- Next, cut pairs of inner rim joists to fit inside the posts. Measure these lengths at the bottom of the posts because the upper part of the post could be slightly out of plumb at this stage. Tack these inner rim joists to the posts with a pair of 16d nails, making sure they won't interfere with the bolts that you'll install later.
- Transfer the joist layout from the ledger board to this inner joist.
- Next, cut the treated 2x6 vertical rim supports (**Photo 3**) and nail them with a pair of 16d galvanized nails every 10 in. to the inside face of the posts to support the joists above. These rim supports should be in contact with the top of the concrete footing.
- Cut your joists to length and screw a 1x2 to the top of each end as shown to support them, and set each joist on layout and secure them with joist hangers.
- To finish the deck framing, you'll need to add the outer 2x10 treated rim joist.
- Remember to slip a strip of metal flashing under the siding and building paper and over the ledger as shown in **Figure A**.

Fasten the decking with trim screws

We used special self-tapping trim screws to fasten the decking to the joists. The slim profile and small heads allow you to sink them just below the surface for a nice, clean look (**Photo 8**). See Buyer's Guide, p. 58, for a supplier.

- Start the decking at the outer edge of the deck (**Photo 5**).
- You don't have to fit the decking tight around the posts because the posts will be built out later. If you have to install the decking up to a wall, maintain a 1/4-in. gap to allow for expansion in warm weather.
- Drive the screws 1/8 in. below the surface of the decking. This will pucker the decking slightly. Flatten the dimpled surface with a blow from a smooth-faced hammer to make the screw hole nearly invisible.
- Buy about six or more extra Torx driver bits because you'll probably strip or break a few of them.

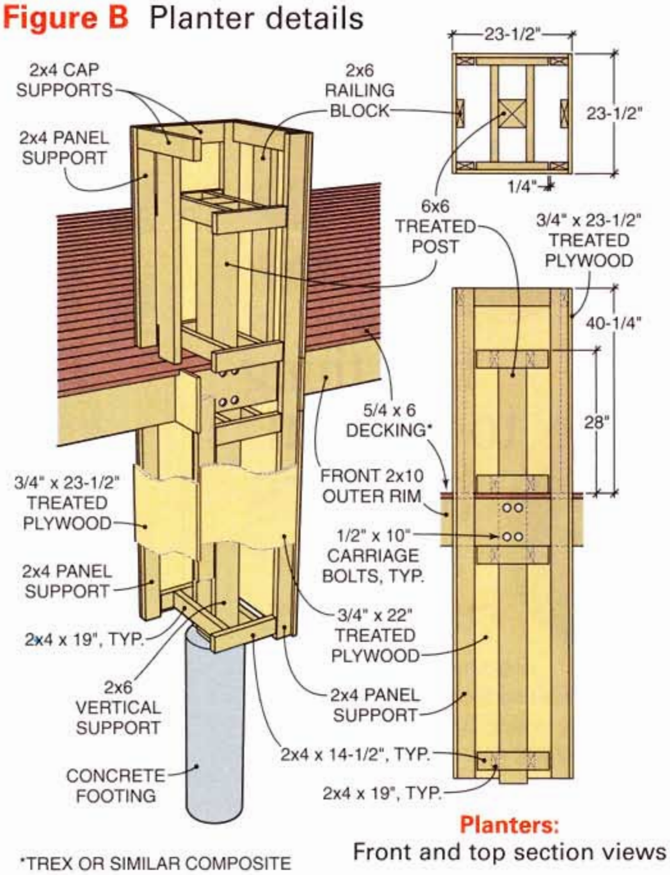
Build the planters

Now that the basic deck is framed and decked, it's time to build out the planters using the 6x6 post as the core. First, measure up 28 in. from the decking on each 6x6 post (**Figure B**), use a square to mark all four sides and cut the posts along the mark. Your circular saw won't cut through completely, so finish the cut with your handsaw.

To build the posts out to the larger dimensions of the planter, you'll need to build four sets of outriggers for each post. These outriggers are cut from treated 2x4s and screwed to each post with 3-in. galvanized deck screws. Keep the bottom outrigger set 1-1/2 in. above the brackets.

Next, cut 22-in.-wide pieces from 3/4-in. treated plywood to use as sheathing for the front and rear of the planters. Measure the lengths of plywood so they'll be flush with the bottom outrigger and then extend 40-1/4 in. above the decking. Complete these front and rear panels by screwing a pair of treated 2x4s at the outer edges (**Photo 7**). You'll notice that our length was a bit over 8 ft., so we added a piece of plywood to fill later. Screw the plywood panel to the outriggers. Make the inner section of the planter in two separate pieces (one above the deck and one below). Check the positioning of each panel with a framing square to make sure the planter box will be square when you finish it. With the front and rear plywood panels screwed into place, cut and screw the side panels into place to complete the box. Finally, cut lengths of 2x4 to fit between the upright 2x4s of each box to support the trim at the top. Cut 2x6 blocks to support the railing (**Figure B**).

Figure B Planter details



Planters:
Front and top section views

Great Garage Contest Rules

This contest is open to residents of the United States, its territories and possessions who are 18 years of age or older. Employees of *The Family Handyman*, The Reader's Digest Association, Inc., or affiliated or subsidiary companies, or members of their immediate families, are excluded from entering.

No purchase is necessary to enter.

Entrants should send a photo and a description of their garage explaining why it should be named the winner in one of the following five categories: Garage Hints and Tips, show us how you have made your garage a better space, inside or out; Best Garage Shop, show us your dream workplace; Most Organized Garage, show us how you ended garage clutter; Most Interesting Use for a Garage, anything unusual you have done to your garage; Coolest Garage, show us your comfortable, organized, creative, inspiring and just plain cool garage. Send slides, prints or digital photos. Digital photos must be a minimum of 900 x 1,500 pixels, and should be sent on a CD. Include a written description of your garage or garage tips and a cover sheet that indicates which category you're entering, your name, street address, daytime phone number and e-mail address. Entries will be judged based on the broad appeal of the garage or garage idea (60%), originality of approach (20%), and quality of photography and description (20%). One winner will be selected in each category, and from these five winners, we will select one grand prize winner, one second prize winner and three third prize winners. All judging will be accomplished by editors of *The Family Handyman* and the decisions are final.

All entries must be sent by mail. Please place the completed entry in an envelope addressed to: "Great Garage Contest," *The Family Handyman*, 2915 Commers Dr., Suite 700, Eagan, MN 55121. All entries must be postmarked by June 1, 2006, the closing date. Only one entry per contestant is allowed.

Contest entries will not be returned. All submitted materials become property of *The Family Handyman* and its parent and affiliated companies. We reserve the right to use your entry in all print and electronic media, and to edit it for brevity and clarity.

Winners will be selected on or about June 15, 2006, and will be notified by mail within one month of selection.

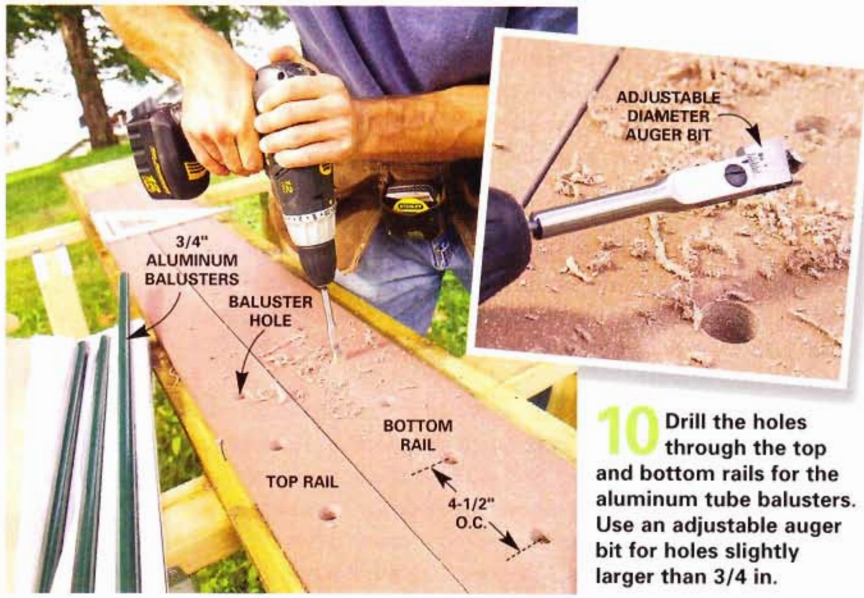
Prize information: The grand prize winner will receive the following Ryobi tools and accessories, courtesy of Ryobi Power Tools: 18-v One+ caulk gun, 18-v One+ chain saw, 18-v One+ Corner Cat finish sander, 18-v One+Torque IV drill/driver, 18-v One+ hammer drill, 18-v One+impact driver, 18-v One+jigsaw, 18-v One+laminate trimmer, 18-v One+ laser circular saw, 18-v One+nailer/stapler, 18-v One+ reciprocating saw, 18-v One+ right angle drill, 18-v One+ speed saw, 18-v One+ Tuff Sucker wet/dry vac, 18-v One+flashlight, (4) 18-v One+ battery packs, (7) 18-v One+ lanyards, (2) 18-v One+ chargers, 18-v One+ vehicle charger, 10-in. bandsaw, 10-in. portable table saw, 12-in. compound miter saw, universal miter saw stand, multiTASKit, One+ accessories kit, 215-pc. super drilling kit, pressure washer, cultivator and 18-in. straight shaft string trimmer (total retail value: $2,633.10). The second prize winner will receive the following, courtesy of E3 Spark Plugs: Ryobi 17-in. curved shaft string trimmer, Ryobi blower vac, Ryobi gas pole saw, and (3) E3 small-engine spark plugs (total retail value: $454.) The three (3) third prize winners will receive one case of Castrol GTX High Mileage motor oil, courtesy of Castrol USA (retail value: $18 each. Total retail value: $54).

The prizes are non-transferable. Sponsor reserves the right to substitute prizes of equal or greater value if any of the stated prizes are not available at the time of award.

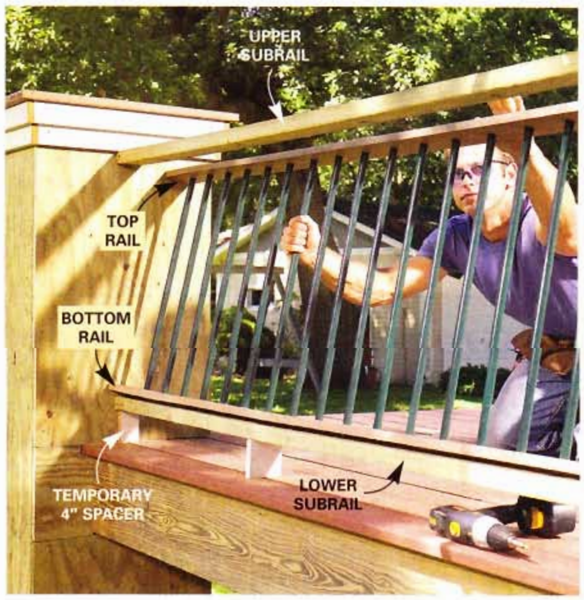
Winners will be required to sign and return an affidavit of eligibility within 14 days of attempted notification. Noncompliance within this time period will result in disqualification and an alternate winner will be selected. All federal, state and local laws and regulations apply. All taxes are the responsibility of the winner. Winner will be requested to give permission for the use of his or her name in promotional material.

The total number of contestants anticipated nationwide is 5,000.

Consumer Information: If you wish to receive a winners list, write to: Winners List, The Family Handyman, 2915 Commers Dr., Suite 700, Eagan, MN 55121.



10 Drill the holes through the top and bottom rails for the aluminum tube balusters. Use an adjustable auger bit for holes slightly larger than 3/4 in.



11 Cut and screw on 2x4 subrails. Then fit the rail section between them. Center the rails and then screw the rails to the subrails (see Figure C, p. 56).



12 Cover the railing side joints with trim pieces. Secure the bottom center of each railing section with a treated 2x4 block screwed into place from above and below.

Add trim to the planters

The tops of the planters are first trimmed with Miratec boards. This trim is nailed to the perimeter of the top and then ripped and cut to make the corners of the planters. The very top and the bottom of each planter are trimmed with Trex material, which is even more water resistant. This composite will withstand the moisture rigors of rain and plants at both the bottom and the top of the planters. Be sure to screw each layer at the top and bottom with the decking trim screws. Check the size of your plastic pots and make the trim at the top fit snugly around the rim of the pot.

Now rip 3/4-in. Trex boards to 5-1/2 in. wide, and cut them to fit at the bottom of the planters. You may need to taper these trim pieces to follow the grade (**Photo 13**), making sure they're above the ground 1-1/2 in. Then make corner boards from the 3/4-in. trim as shown in **Photo 13** and nail the trim to the corners of each planter,

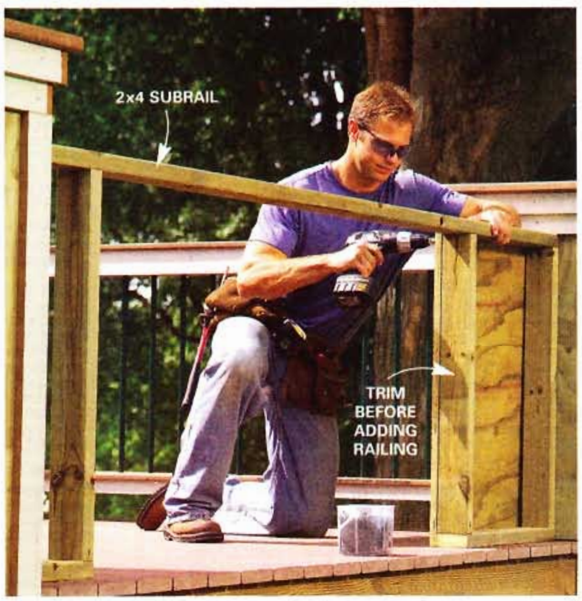
Build railings from low-maintenance materials

First measure between the planters and then cut top and bottom subrails from straight 2x4 treated wood (**Photo 11**). These are the structural supports for the railing system. Set 4-in.-long spacers under the lower subrail, then center the subrail in the planter side and toe-screw the bottom of it into the planter on each end. Screw the top subrail into the planter sides so the top of it rests just under the trim as shown in **Figure C**, p. 56.

To make the balustrade insert between the subrails (**Photo 10**), rip a 3/4-in. x 6-in.-wide Trex board for the bottom rail and another the width of the 2x4 (ours was a fat 3-5/8 in.) for the top. Lay out the baluster positions every 4-1/2 in. on center for the 3/4-in.-plus holes. Set your adjustable auger bit (**Photo 10**) so it will drill a hole just large enough to allow the metal baluster tube to slide freely. **Tip:** Drill the holes through the Trex board and into sacrificial plywood backer below to avoid tear-out around the



13 Trim the plywood planter boxes at the bottom with 3/4-in. Trex boards. Trim the vertical corners with ripped lengths of Miratec trim.



14 Frame the solid end panels with the treated 2x4 top subrails and a treated 2x4 fastened to the deck with 3-in. galvanized screws. Add 3/4-in. plywood to cover the sides.



15 Trim the inside faces of the 2x4 frame, then install the lower 2x4 subrail, baluster assembly and trim. Cap the panel with a wider 3/4-in. x 7-1/4-in. Trex board.

hole. Also cut your aluminum balusters to length with a 40-tooth carbide blade in a circular saw.

Now you can partially assemble the rail before fastening it to the subrails. First, apply 1-1/2-in. tape to the underside of the lower rail to close off the drilled holes. Stack the upper rail over the lower so the holes match and then insert the tubes. Pull the upper rail slowly and deliberately up along the tubes until it's near the top. The friction will hold the top rail in position as you carefully insert the balustrade (**Photo 11**), center it on the subrails and then screw it in place with 1-1/2-in. decking screws. Next, cover the top of the upper subrails with a 3/4-in. Trex board ripped to 6 in. wide. To cover the joints between the rails and subrails, rip trim pieces (**Photo 12** and **Figure C**), then nail them on with your finish nailer.

Build the end panels

To add extra privacy at the ends of the deck, build 2-ft.-wide walls extending from the planters and from the house (**Figure A**). Use the top subrail as the top plate of these walls (**Photo 14** and **Figure C**).

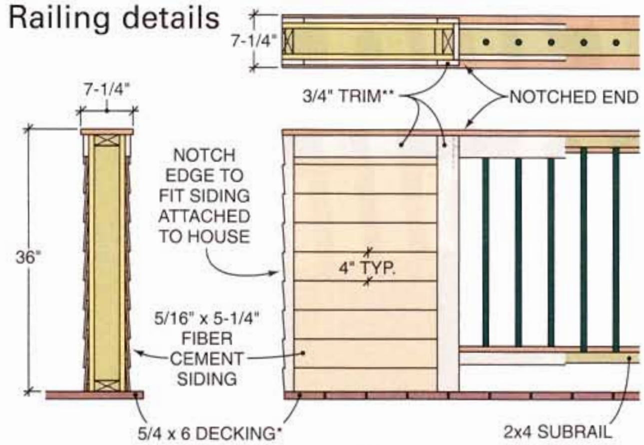
To make the trimming easier here, cap the ends of the short walls with trim, and then install the lower 2x4 subrail over the trim. Make the balustrade the same way as before and then add a 7-1/4-in.-wide railing cap instead of the 6-in.-wide cap that you used for the other rails. Trim the rest of the panels as shown in **Figure C** and **Photo 15**.

Nail cement siding to the panels and planters

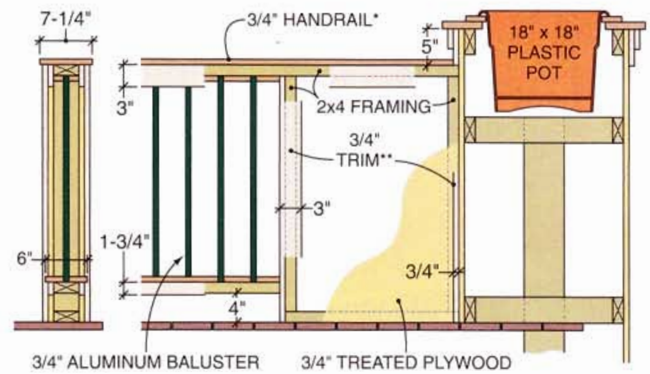
Cut the cement siding with a dry diamond blade in your circular saw. You must wear a good-quality dust mask and safety glasses and pay attention to which way the wind is blowing. This stuff really kicks up the dust as you cut it. And if your neighbor's convertible is downwind, ask her if you can move it before you cut.

Fitting the siding around all the railing parts is definitely tedious. A jigsaw will help you make the intricate cuts, and a sharp wood chisel will let you knock out hard-to-cut sections. Fasten the siding to the plywood with a framing nailer fitted with galvanized siding nails (**Photo 16**). Adjust the pressure of your compressor to set the nail head flush with the surface of the siding. Caulk all the joints with siliconized acrylic caulk when you've completed the siding.

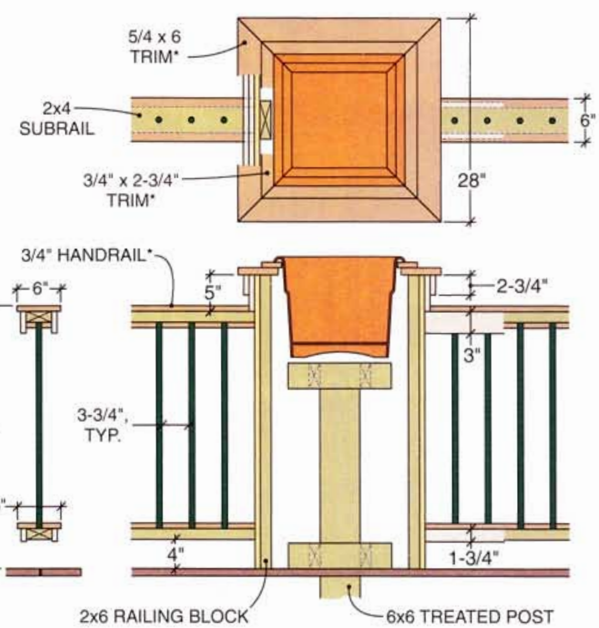
Figure C
Railing details



End railing:
To house

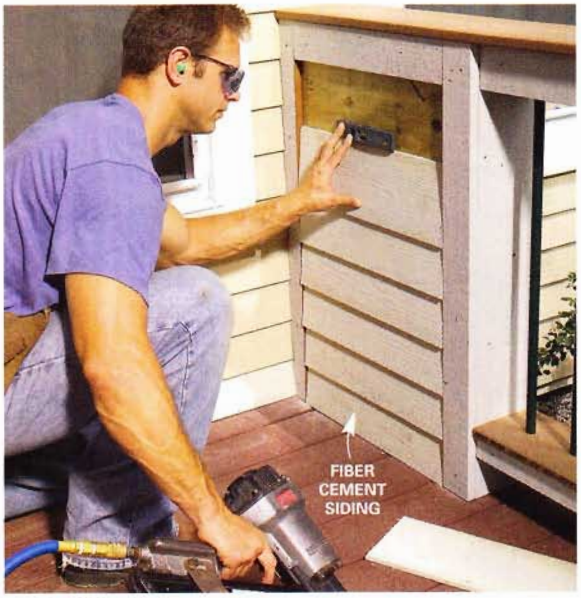


End railings:
To planters



Front railings:
To planters

*TREX OR SIMILAR COMPOSITE
**MIRATEC OR SIMILAR ENGINEERED WOOD PRODUCT



16 **Cut cement board siding to fit between the trim pieces, leaving a 1/16-in. gap at each end. Use galvanized siding nails and a pneumatic nail gun to secure the siding to the plywood.**



17 **Cut your stair carriages from 2x12 treated wood, making sure the span between the carriages is no more than 16 in. Position the end carriage on the column so it aligns with the deck joist on the opposite side of the column. See Figure D for details.**

Build the stairway

Because you're using composite decking for the stair treads, you'll need to cut enough carriages to support it at least every 16 in. on center. Each stairway will be unique to each deck, of course, but the basic construction process shown in **Figure D** remains the same. To make the railing complement the other guardrails of the deck, we made the stairway wider than necessary. The outer carriage that fits against the planter box is exactly the same as the other carriages but is cut short at the top. Make sure it aligns with the rim joist of the deck on the other side of the planter. Cut riser boards from a 1x8 Trex board and cut the stair treads from 5/4 x 6 decking. We placed an additional hand railing against the house for a continuous grip from top to bottom. **Note:** The stair balusters are not drilled into place like the other balusters but are held with special heavy-duty angled plastic connectors (see Buyer's Guide below).

Paint parts of your deck to match your house

The cement siding and Miratec trim are already primed, so spot-prime any cut ends or nail heads and then paint the trim to match the house. The Trex material can be painted as well. We painted the Trex boards at the base of the planters and the risers of the stairway. The rest of the Trex pieces have a warm natural color that may fade a bit over the years but will be maintenance free.

Buyer's Guide

- You can find the special self-drilling trim deck screws at www.grkfasteners.com.
- You can usually find Trex, Miratec and similar composites at your local lumberyard. However, you may need to special-order these products.
- The aluminum deck balusters and plastic connectors are available at lumberyards. For a dealer in your area, go to www.deckorators.com.

SHOPPING LIST

Framing materials

ITEM	QTY.
2x10 x 12' treated wood (joists and blocking)	26
2x10 x 14' treated wood (side rim joists)	2
2x10 x 10' treated wood (inner rim joists)	6
2x10 x 16' treated wood (outer rims and ledger)	4
2x12 x 12' treated wood (stair carriages)	2
6x6 x 8' treated wood (posts)	5
4x4 x 4' treated wood (stair post)	1

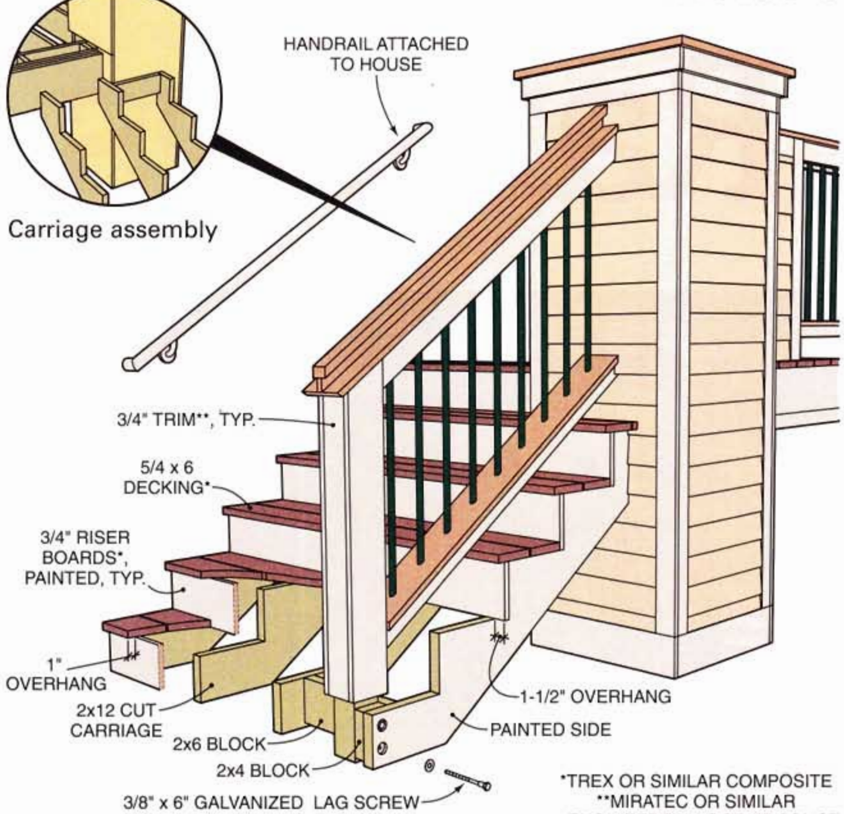
Planters, rails, trim

ITEM	QTY.
2x4 x 8' treated wood (outriggers and subrails)	50
2x4 x 12' treated wood (subrails for end panels)	2
3/4" x 4' x 8' treated plywood (planters and panels)	12
5/4 x 6 x 16' Trex boards (decking, stair treads, planter caps)	66
3/4" x 7-1/4" x 12' Trex boards (railings, rail caps, stair risers, planter bottoms)	26
3/4" x 7-1/2" x 16' Miratec boards (planter, railing, rim joist trim, end panel trim)	40
5/16" x 5-1/4" x 12' fiber cement siding	50

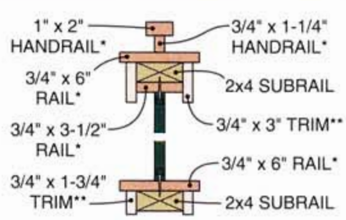
Hardware and miscellaneous

ITEM	QTY.
2x10 galvanized joist hangers	44
2-1/2" x 1-1/2" aluminum ledger flashing	30 ft.
3/4" x 28" aluminum tube balusters	101
Plastic stair baluster anchors	18
6x6 concrete-to-wood post anchors	5
80-lb. bags of Quikrete or Sakrete concrete mix	30
1' x 2' cardboard tube forms	5
3" deck screws	10 lbs.
2-1/2" deck trim screws (for decking)	15 lbs.
1-1/2" deck trim screws (for railing assembly and trim)	5 lbs.
1/2" x 4" galv. lag screws and washers (for ledger)	38
3/8" x 6" galv. lag screws and washers (stairway newel post)	2
1/2" x 10" galv. carriage bolts, nuts and washers (rim joists-to-post connection)	20

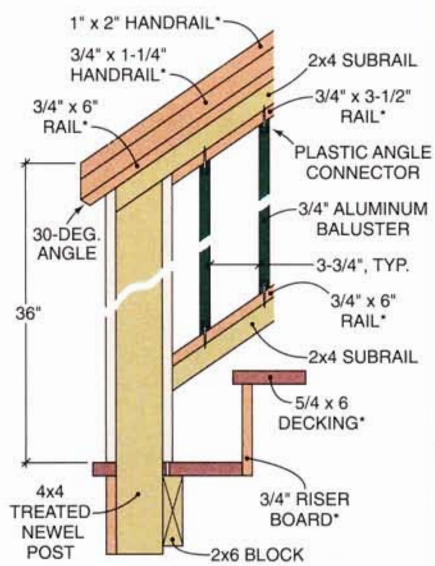
Figure D
Staircase details



*TREX OR SIMILAR COMPOSITE
**MIRATEC OR SIMILAR ENGINEERED WOOD PRODUCT



Railing detail: Cross section



Railing detail

Art Direction • BECKY PFLUGER
Photography • BILL ZUEHLKE
Illustration • BRUCE KIEFFER
Deck Design • DAVID RADTKE

No-maintenance Deck Railings

AN EASY-CARE HOME ARTICLE



Composite railing systems blend well with composite decking, but they can be used with wood decks as well.



TREX

by Eric Smith

One of my saddest experiences as a contractor occurred when I revisited a gorgeous wood deck I had built 10 years before. It was a wreck. The homeowner had tried to keep up with the maintenance, but he'd found that it was too much work. He had discovered, like so many other wooden-deck owners, that even when it doesn't rot, wood tends to crack, splinter and warp.

Fortunately, a whole range of new deck and railing materials have been developed in the last 10 years. These last longer than wood and need little maintenance. Although still twice the price of standard treated wood, composite woods—and other maintenance-free materials like vinyl and aluminum—are getting popular fast.

In this article, we'll walk you through the variety of materials now available for low-maintenance deck railings and tell you their strengths and weaknesses. While many are by the same manufacturers that make decking, they're a separate product. You can use them on any type of deck, including decks made of wood.

Material options: Composites

The post sections shown in **Figure A** illustrate the range of materials now used for railings. The composites are the most popular, as is composite decking. They're made from a blend of wood fibers and either virgin or recycled plastic, mixed into a paste and then extruded into the various railing shapes. The fibers provide

CORRECTDECK

strength and stability while the plastic protects the fibers from moisture, rot and insects. Most lumberyards and home centers now stock at least one or two brands and will special-order others. Each brand has a slightly different design, selection of colors and sometimes texture. Some are hollow and some are solid. Each system comes with its own assembly directions, which must be followed to ensure strength and safety.

Solid types are more like solid wood; you bolt the posts to the deck framing just as with wood 4x4s. Since the color is consistent throughout the material, you can shape or bevel edges with a router and leave post ends exposed. And since the material is solid, it's more resistant to dings and nicks. On the downside, solid composites are heavier, and if you don't support them properly, they'll sag. And you won't find them with PVC coatings.

Hollow composites are lighter and

Tips for installing composite railings

If you've worked with wood, you won't have any trouble working with composites. Each system is engineered to meet the requirements of the building code, so it's important not to deviate from those instructions. Composites (as well as PVC and plastics) also need extra space for expansion in hot weather. The instructions will specify how much, or the fastening system will account for this factor. Composites are not meant for ground contact.

Keep in mind that composites can't be used for structural purposes. And although they're heavier and denser than wood, they're neither as strong nor as stiff. They can break if dropped or bent too far. If you skimp on supports, composites will sag from their own weight. On the plus side, this means that some types will curve. The Trex brand in particular emphasizes this feature, and its installation manual goes into detail about how to heat handrails and decking and force them into attractive permanent curves.

And finally, be aware that some systems have limitations and not all have been tested and approved to meet the building code. Always check this detail with the manufacturer and with your local building officials.

Figure A Low-maintenance railing materials

Aluminum: hollow posts; hollow railing and balusters; usually surface bolted to deck; special assembly system; $35 to $40 per lin. ft.

Vinyl and plastics: hollow posts; railing and balusters hollow and usually steel reinforced; 4x4 wood posts sometimes required; special assembly system; $30-plus per lin. ft.

PVC-coated composites: posts hollow; railings and balusters hollow; 4x4 wood posts required; special assembly system; $25 to $35 per lin. ft.

Hollow composites: hollow posts; railings and balusters either solid or hollow; 4x4 wood posts often required; special assembly system; $18 to $25 per lin. ft.

Solid composites: solid posts; railings and balusters either solid or hollow; often install like solid wood; $18 to $25 per lin. ft.





Vinyl railings retain a crisp white appearance and are easy to clean. They're hollow and typically require more parts for assembly.

CERTAINTEED

slightly stiffer. Rails and balusters are usually connected with special brackets, which are hidden (**Figure B**). They allow you to make strong connections easier and faster. You can also slide the hollow posts in most systems right over standard 4x4 wood deck posts. In fact, some hollow systems require 4x4 wood posts for strength. On the downside, hollow posts tend to be larger than solid types. They often require special trim pieces to cover joints and edges. Curves aren't an option as they are with solid railings.

Most composites are paintable, but eventually the paint will age and you'll have to repaint, increasing the maintenance factor.

The plastic option

Several companies make solid-plastic decking and handrail systems that look like composites. You install them similar to hollow composites. They're slightly more expensive, but the manufacturers claim that solid plastic is more durable and long lasting.

Vinyl railings

If you want a white railing, vinyl railings can be a good choice. You'll find a wide price range. The more expensive varieties are long lasting and tough and have well-engineered metal inserts for stiffness and strength. Vinyl doesn't stain or collect mold as easily as composites in most situations, and its smooth surface is easy to clean. On the downside, all the parts are hollow, so vinyl railings usually require more pieces for strength. You slip the vinyl posts over either a sturdy metal base or a wood 4x4 bolted to the deck frame.

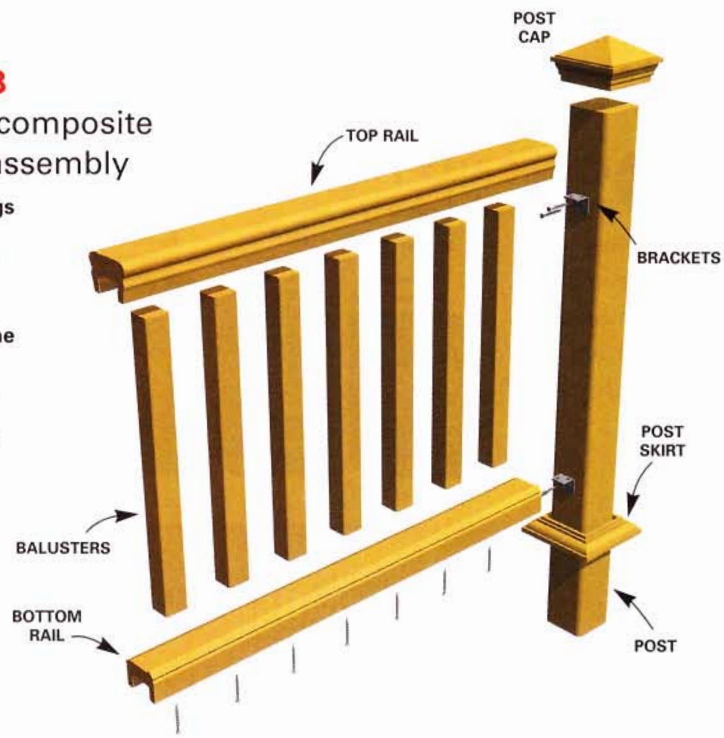
Aluminum railings

All-aluminum railing systems are made by many companies, usually for apartment and commercial buildings. They're slimmer and a bit commercial looking, but they're extremely long lasting. Since they are usually surface mounted, they require especially strong anchoring systems.

Figure B

Typical composite railing assembly

Most railings are engineered as a complete system, including the parts we show here. Fastening techniques vary.

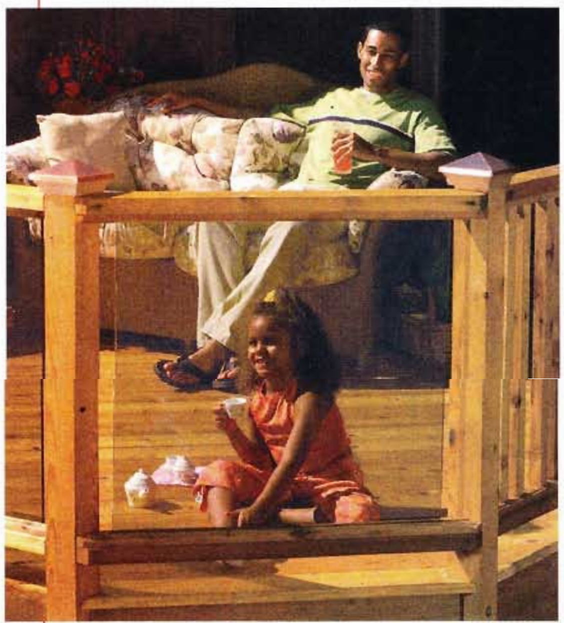


Low-maintenance components



DECKORATORS

Aluminum balusters are inexpensive and available in a number of attractive designs in highly durable colored finishes. You should never have to refinish them. They eliminate that endless chore of cleaning and refinishing wood balusters. About $6 per lin. ft.



Glass panels leave you with a perfect, uncluttered view, and they also block the wind. They have to be tempered (hardened) for safety and we recommend that you use a slightly smoky glass so birds (and kids!) don't accidentally run into them. Expensive, about $60 per lin. ft.

Buyer's Guide

COMPOSITE RAILINGS

CHOICEDEK: Solid; (800) 951-5117; www.choicedek.com; sold through Lowe's

CORRECTDECK: Solid; (888) 290-1235; www.correctdeck.com

TIMBERTECH: Hollow; (800) 307-7780; www.timbertech.com

TREX: Both solid and hollow PVC-coated composite systems; (800) 289-8739; www.trex.com

VERANDA: Hollow; (877) 463-8379; www.verandadeck.com; sold through Home Depot

PLASTIC RAILINGS

EON: Hollow; (866) 342-5366; www.eonoutdoor.com

VINYL RAILINGS

CERTAINTEED: EverNew Vinyl; (800) 782-8777; www.certainteed.com

ENDURANCE: (877) 420-7245; www.rdirail.com

KROY: (800) 933-5769; www.kroybp.com

ALUMINUM RAILINGS

DECKORATORS: Aluminum balusters; (800) 332-5724; www.deckorators.com

RAIL BLAZERS: (877) 883-7325; www.peakproducts.com

Find glass and more aluminum railing sources in your local Yellow Pages.

Art Direction • BOB UNGAR
Photography • BILL ZUEHLKE, UNLESS OTHERWISE NOTED
Illustration • TREVOR JOHNSTON

Weather proof exterior trim

PVC trim looks and cuts like wood, but there are a few special tricks to install it successfully.

by Travis Larson



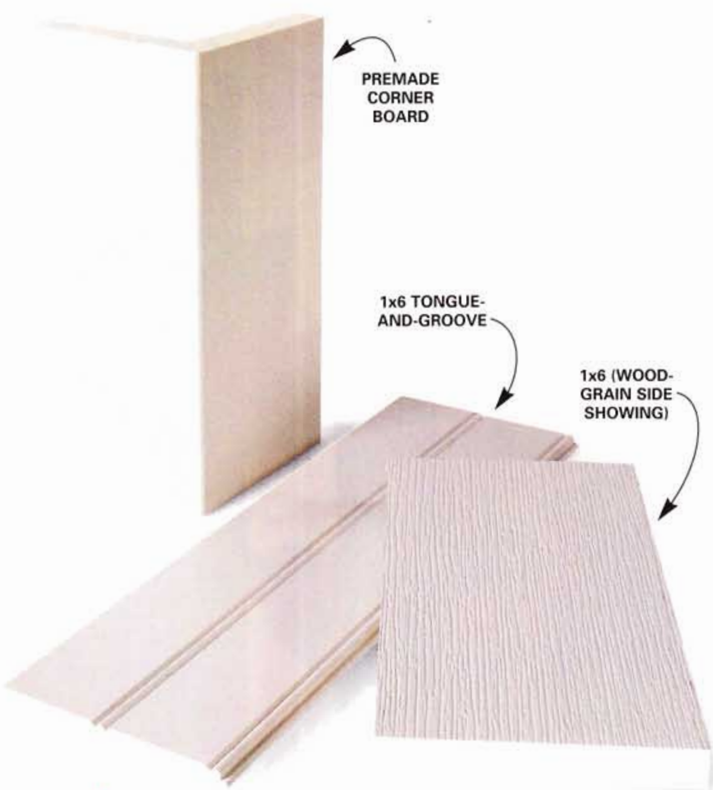
Tired of scraping and repainting your trim? Or disheartened when you find that your trim has rotted and will no longer hold paint? Then step back and consider the advantages of replacing those problem boards with PVC trim—your worries will be over.

Cellular PVC (polyvinyl chloride) trim is a close cousin of the familiar white plastic plumbing pipes. (The "cellular" part just means it's filled with zillions of tiny air bubbles to make the material lighter and less expensive to manufacture.) But unlike its cousin, it's specially formulated to make it resistant to sunlight, hold paint well and easy to work with.

PVC trim looks just like wood (well, *flawless* wood) and lasts virtually forever. It's impervious to rot and insect attack and doesn't absorb water. It holds paint well because water can't penetrate the material behind the paint. And if you like the look of white trim, you may not have to paint it at all (more on this later). It's an especially good substitute for wood trim in areas that are highly exposed to water, such as corner board and door trim that's near the ground or unprotected by an overhang.


An Easy-Care Home Article

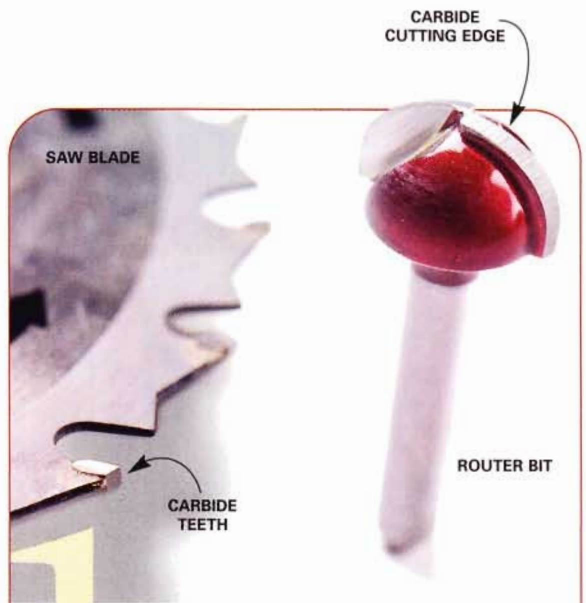
Figure A Cellular PVC profiles



Although you install cellular PVC trim almost like wood, there are a few crucial differences. In this story, we'll show you those special cutting, joining and fastening techniques so your PVC trim will perform flawlessly for the life of your home. Don't worry—there aren't any fancy tools or skills required. If you've cut and installed wood trim before, you have the moxie to work with PVC.

PVC trim is sold in 5/4 (1-in.) and 4/4 (3/4-in.) thicknesses in the common widths found with wood. But the selection may be limited. You'll probably have to special-order some thicknesses and widths. Trim is sometimes only sold in 18-ft. lengths, so you may want to have your order delivered. Most companies offer material that has an embossed wood grain side and a smooth side, so you can choose the look you want. Don't confuse cellular vinyl trim with polyurethane-core, vinyl-coated products. While they too are highly durable low-maintenance products, their installation techniques are different. (See "New Products," p. 95, for more information on polyurethane trim.)

PVC trim isn't cheap; expect to pay about the same price you'd pay for clear, knot-free wood. (We paid $41 for an 18-ft. 1x6.) Other PVC products are also available, including preformed outside corners (**Figure A**), tongue-and-groove boards, and sheet goods that you can carve up and work just like plywood. Find PVC trim by contacting lumberyards in your area. Or check the Buyer's Guide, p. 78, to find a supplier.



1 Cut with carbide-tipped saw blades

Cut PVC trim with the same hand and power tools that you use for wood. But use only carbide-tipped saw blades; plain steel ones will dull quickly. In general, the more teeth a blade has, the smoother the cut edges will be. We recommend standard combination saw blades. You can easily rout decorative edges or grooves with routers or shapers, but use carbide-edged bits as well.

Sawn edges aren't as easy to sand as wood. So if possible, plan your work so that newly cut edges will butt against siding, soffits or other trim, and let the smoother factory edge show wherever possible. Sanding isn't always necessary, especially if you plan to paint. But sand exposed edges that are highly visible, like near the front door. Use a random orbital sander with 100-grit paper. Belt sanding doesn't work well because the friction from the belt melts the plastic rather than smoothing it.





2 Fasten with stainless steel screws or hot-dipped siding nails



When it comes to choosing your fasteners, don't scrimp by using fasteners that won't last as long as the vinyl trim. Stainless steel screws with small finish heads are the best choice because they'll never corrode. You can also use hot-dipped galvanized nails, but they may corrode and stain the trim over time. If you want a flawless finish, choose screws, countersink them slightly, and then use an exterior filler to hide the screw heads. In areas that are completely protected from water, like under a soffit, you can use a 15-gauge air nailer with galvanized nails and fill the holes with paintable caulk or filler.

PVC tends to expand and contract with temperature changes, so fasten it well. Drive screws or nails into framing only, never just to the sheathing. Select fastener lengths that will penetrate at least 1-1/2 in. into the framing. No predrilling or countersinking is necessary if the temperature is over 40 degrees F when you install the trim. But lower temperatures call for both drilling and countersinking; otherwise the vinyl may split. Place fasteners every 16 in. at both sides of the trim, spacing them about 1/2 in. from the edges. If you're using 10-in. or wider trim, add another fastener in the middle.

Follow all of the flashing techniques that you would with wood trim. You still want to prevent water from penetrating between the trim and the wall sheathing behind.

3 Cement seams for sturdy, watertight joints

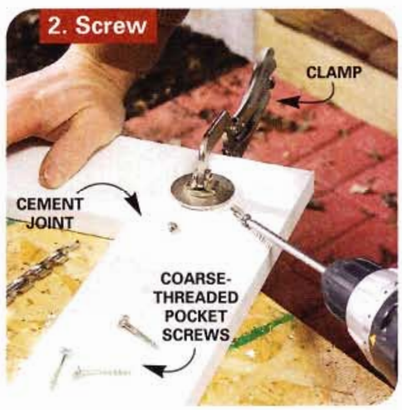
One advantage of PVC is that you can "weld" joints to keep them tight and prevent water from penetrating behind the trim. Manufacturers recommend a special type of PVC cement that has a longer "open time" than the type of cement that plumbers use on plastic pipes. You can buy this cement wherever you buy the trim. You'll have about five minutes of working time to clamp and fasten the joints before the cement sets. Smear a little cement on both surfaces and then clamp or screw the joint together. Wipe off any excess right away with a damp rag; unlike PVC pipe cement, it's water soluble and won't mar finished surfaces if you remove it immediately.







1. Drill



2. Screw

4 Preassemble window and door trim

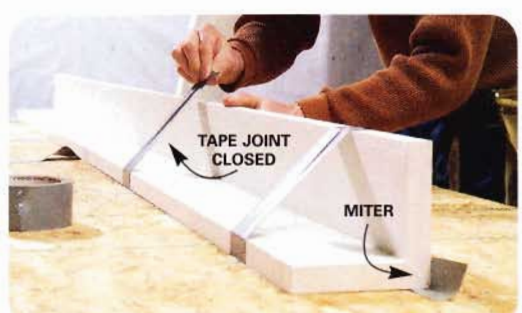
Prebuild PVC trim assemblies and then install them as a unit rather than a piece at a time as you would with wood. This will take a little longer but will result in perfectly tight joints that won't need caulk. Cement and screw end joints like miters and butt joints. Longer joints like corner boards can be simply cemented and clamped (**see below**).

Pocket screws are the best method of joining corners when you're cementing window and door trim assemblies (**Photos 1 and 2**). Use the coarse-threaded version of pocket screws. (See "Using Tools," Feb. '03, p. 23, for more details about pocket screws. To order a copy, see p. 7.) Cut miters to fit and dry-fit your cuts to check the joints and lengths. Measure carefully when applying trim around vinyl or aluminum-clad windows to leave a 1/8-in. expansion gap between the trim and frame for caulk.



5 Preassemble corner boards

Some manufacturers offer premade trim for outside corners, but it's somewhat pricey. It's easy to make your own. Start by ripping 45-degree bevels on one edge of each board on a table saw. Then push the bevel tips together tightly and tape the boards together with packaging or duct tape. Apply cement to both bevels, then fold the boards together and clamp the joint for about 15 minutes with more strips of tape.





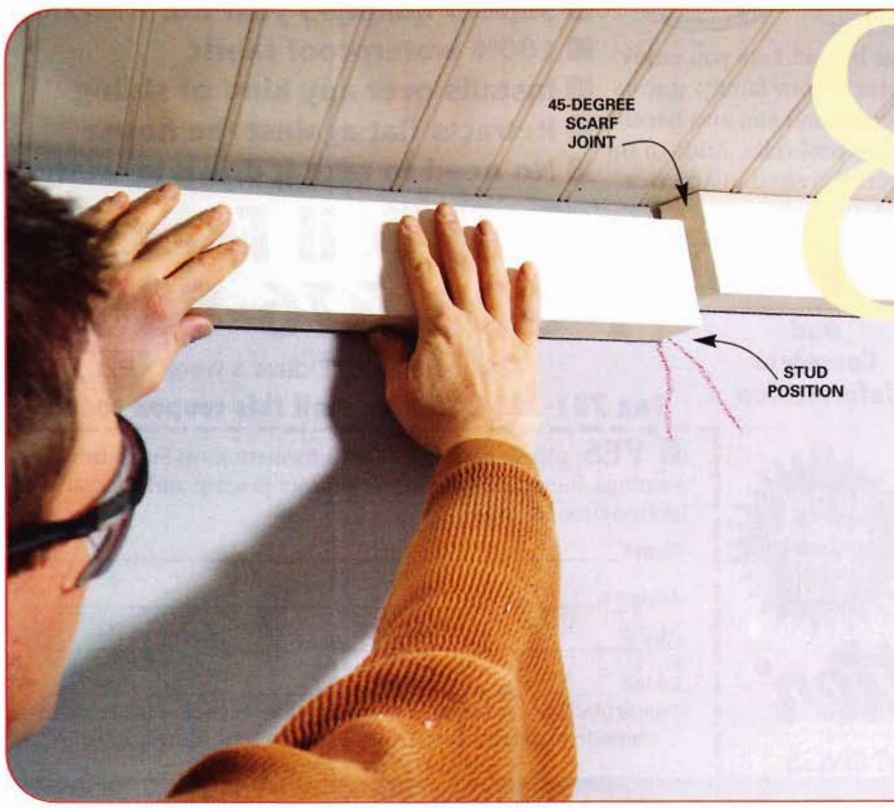
Leave expansion gaps on long pieces

PVC trim will expand and contract with wide variations in temperature. If you're installing trim in temps higher than 80 degrees F, cut pieces to fit tightly. If it's between 60 and 80 degrees, leave a 1/16-in. gap for every 18 ft. of length. Below 60 degrees, leave a 1/8-in. gap. After installation, cover the gap with acrylic or urethane caulk. Avoid silicone-based caulks; they don't adhere well to vinyl.



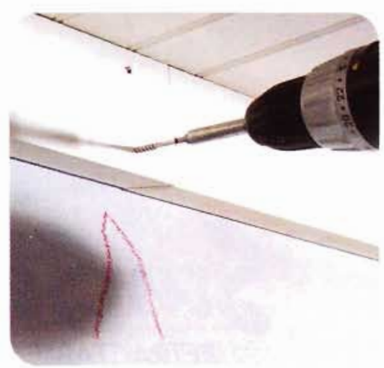
Fill fastener holes before you paint

Fill small holes with an exterior filler and lightly sand it smooth after it dries. Or use a paintable caulk and smooth it with your finger. Fill larger holes or damaged areas with auto body filler, and again, sand it after it cures.



Splice long trim pieces with scarf joints

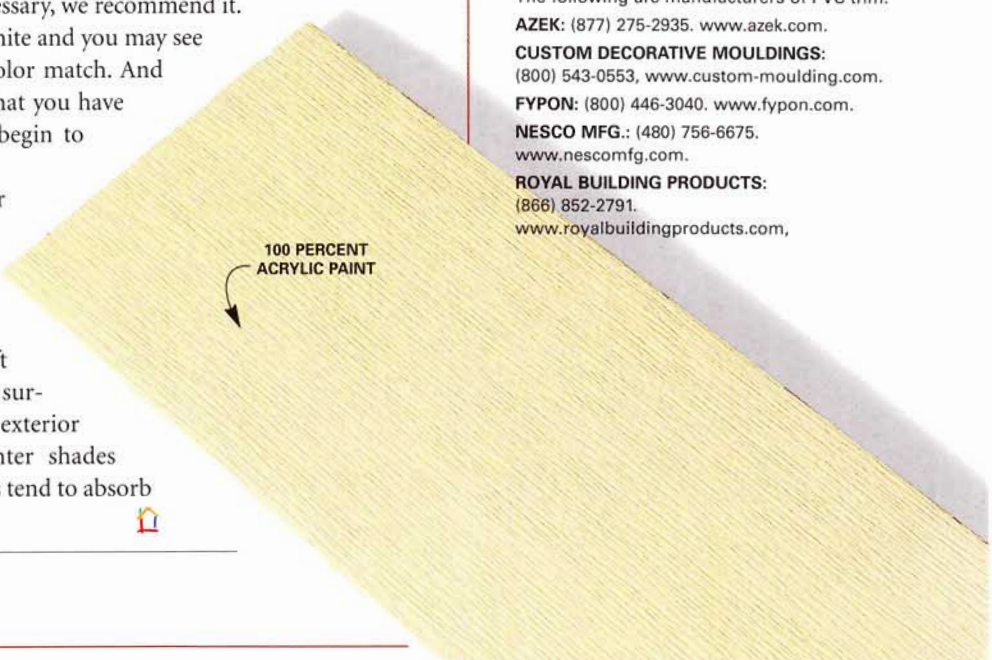
Splice long pieces of trim with "scarf joints," that is, overlapping 45-degree joints. Cut the first piece of trim to fall just short of a stud so the second overlapping trim piece can be fastened to the stud an inch or so from the end to prevent splitting.



9 Paint vinyl trim with 100 percent acrylic exterior paint

Although painting PVC trim isn't necessary, we recommend it. Otherwise your trim will look stark white and you may see filler over holes that's not an exact color match. And the edges and ends (especially ones that you have cut or routed) will collect dirt and begin to look gray over time.

There's no hurry for painting after installation; you can wait as long as you want. PVC won't weather or lose its ability to hold paint. Before you paint, use mild detergent to clean off grime and oils left over from handling and make sure the surfaces are dry. Then finish it with any exterior 100 percent acrylic paint. Use lighter shades rather than darker shades. Dark colors tend to absorb more heat and increase expansion.



Art Direction • DAVID SIMPSON
Photography • BILL ZUEHLKE

Buyer's Guide

The following are manufacturers of PVC trim:

AZEK: (877) 275-2935. www.azek.com.

CUSTOM DECORATIVE MOULDINGS: (800) 543-0553, www.custom-moulding.com.

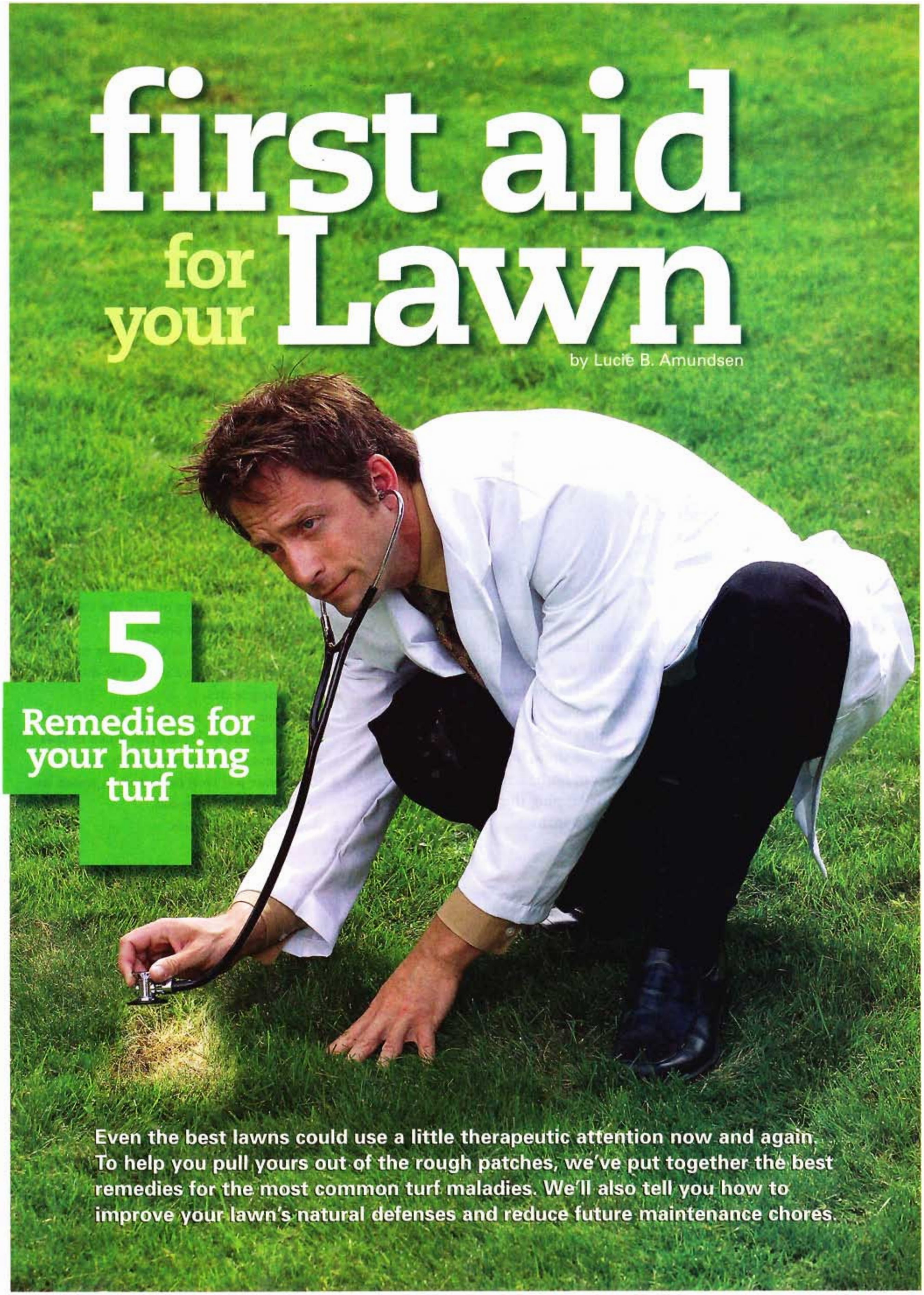
FYPON: (800) 446-3040. www.fypon.com.

NESCO MFG.: (480) 756-6675. www.nescomfg.com.

ROYAL BUILDING PRODUCTS: (866) 852-2791. www.royalbuildingproducts.com,

first aid for your Lawn

by Lucie B. Amundsen



5 Remedies for your hurting turf

Even the best lawns could use a little therapeutic attention now and again. To help you pull yours out of the rough patches, we've put together the best remedies for the most common turf maladies. We'll also tell you how to improve your lawn's natural defenses and reduce future maintenance chores.

PROBLEM:

Dog Spots on Grass



Symptoms: Dog spots are round patches about 4 to 8 in. in diameter with dead grass in the middle, encircled by dark green grass. They're most apparent in the early spring when dormant grass first begins to turn green again.

Cause: Dog urine contains high concentrations of acids, salts and nitrogen, which burn (dry out) the grass roots and kill them. As rain washes the area, the urine is diluted and the nitrogen spreads, causing the grass surrounding the spot to grow faster and turn greener.

Remedy: You have to replant your grass; it won't come back on its own. But first you have to dilute or remove the caustic urine from the soil (**Photo 1**). Thoroughly soak the area with lots of water. Let the hose run for at least three minutes. Then you can start the replanting process (**Photo 2**). Add a half inch of new soil to help absorb any remaining urine (**Photo 3**). Then you can spread new seed, as we show, or use a commercial yard patch mixture (available at most nurseries or home centers) or even sod. In any case, the secret of good germination is keeping the seed moist. And keep the area moist until the new grass is about 3 in. high.

Recovery time: Four to six weeks

tip **When you're watering new seed, moisten the soil daily and keep it damp—but don't soak it. Over-watering is a common mistake.**

An ounce of prevention

1. **Soak your pet's favorite areas in your lawn to get the salts out of the root zone before they kill the grass.**
2. **Fertilize your lawn in the spring to boost the overall color and mask the darker green dog spots.**
3. **Train your pet to urinate in a designated area. Replace or repair the grass in this area annually or cover it with mulch.**
4. **Keep your pet well hydrated to make its urine less concentrated.**
5. **Become a cat person.**



1 **Soak the patch until the grass is sopping wet to dilute the urine acids and salts and wash them deeper into the soil, beyond the grass roots.**



2 **Scrape up the dead grass with a hand rake and remove it. Rough up the area to loosen the soil 1/2 in. deep. Seeds germinate better in soft soil.**



3 **Sprinkle on a 1/2-in.-thick layer of topsoil, then pepper it with grass seed. Cover with a pinch of new soil and press it to firm it up. Keep the area moist until the new grass is about 3 in. high.**

PROBLEM:

Thatch



Symptoms: If your grass feels soft and spongy when you walk on it, your lawn may have a thatch buildup. Thatch is a fibrous mat of dead stalks and roots that settles between the lawn's green leaves and the soil (**photo right**). When this mat becomes greater than 3/4 in. thick, it can cause your lawn to suffer from heat and drought. Affected lawns will rapidly wilt and turn blue-green, indicating they're hot and dry.

Cause: Cutting off too much at each mowing (letting the grass get too long) and cutting too low. Both will produce more dead grass tissue than microbes and earthworms can recycle. Thatch can develop in any soil but is most often associated with high clay content. Other causes are overfertilization and frequent, light watering, which encourage a shallow root system.

Remedy: Slice open a section of your lawn (**Photo 1**). If your grass shows 3/4 in. or more of thatch, it's time to rent an aerator (about $70 per day). An aerator is a heavy machine that opens the soil by pulling up finger-size soil cores. The lawn will absorb more oxygen and water, which will encourage healthy microbe growth and give worms wiggle room.

Aerate in the spring or fall when the grass is growing but the weather is not too hot to stress the plants (**Photo 2**). If the machine isn't pulling plugs, your lawn may be too dry. To avoid this problem, water thoroughly the day before you aerate. You can also rake in topsoil (**Photo 3**) to increase the healthy microorganisms that aid thatch's natural decomposition. Topsoil is available at any garden center.

Recovery time: You can expect the thatch layer to decrease by about 1/4 in. per year, about the same rate at which it forms.

An ounce of prevention

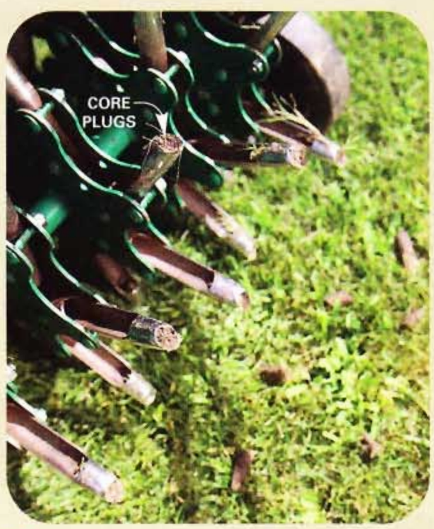
1. **Mow often and cut no more than one-third of the grass height.**
2. **Water your lawn less often but for longer periods to prevent shallow root systems.**
3. **Reduce the amount of fertilizer you spread at any one time.**
4. **Reduce the use of pesticides. This will help keep the worm and microorganism populations healthy.**
5. **Aerate at least once every year if your lawn is prone to thatch.**

CAUTION

Call your local utility provider or 1-888-258-0808 to mark your underground utility lines before you aerate.



1 Slice the turf grass with a shovel and pry it back. If the thatch depth measures more than 3/4 in., aerate at least 3 in. deep.



2 Make two or three passes with an aerator until you've made 3-in.-deep holes 2 in. apart throughout your yard.



3 Spread 1/4 in. of topsoil on the yard's most thatchy areas and then rake vigorously to fill the holes with loose soil.

Renting a lawn aerator

If your goal is to have one of the nicest lawns on the block, you can go a long way toward achieving it with annual aeration.

When a lawn lacks sufficient air (a "compacted" condition), it grows slowly and becomes vulnerable to disease, insects and heat damage. The soil will become impermeable and shed water instead of absorbing it.

Gas-powered aerators are available at most tool rental stores. They're slow-moving but powerful machines, so ask the clerk for handling directions. An aerator weighs about 200 lbs., so be prepared for some heavy lifting or ask your rental store for a ramp to get it into a truck bed or van.

Cool-season grasses should be aerated in the late summer or early fall. Spring is best for warm-season types. (If you're not sure what type you have, take a sample to an expert at a local garden center.)

Resist the temptation to remove the thatch with a rented power rake. Power raking is less effective than aerating because it typically removes less than 15 percent of thatch and may damage the healthy grass as well.



PROBLEM:

Fairy Ring

Symptoms: Fairy rings are circles approximately 3 to 8 ft. wide that consist of a dark green and fast-growing area of grass surrounding an inner area of partially dead or thin grass. Some rings also produce mushrooms.

Cause: Fairy rings are caused by fungi that live in the soil. As the fungi feed on organic matter, they release nitrogen, causing the grass to turn dark green. As the colony grows, it disturbs the flow of needed water to the turf roots, creating thin or dead spots. Fairy rings often begin with the decomposition of organic matter, such as an old tree stump buried under the lawn.

Remedy: By bringing up the color in the rest of your lawn with a nitrogen fertilizer, you can mask much of the overgreening of the fairy ring (**Photo 1**). Hand-aerating the ring will break up the fungus and allow the flow of water and other nutrients to the grass roots (**Photo 2**).

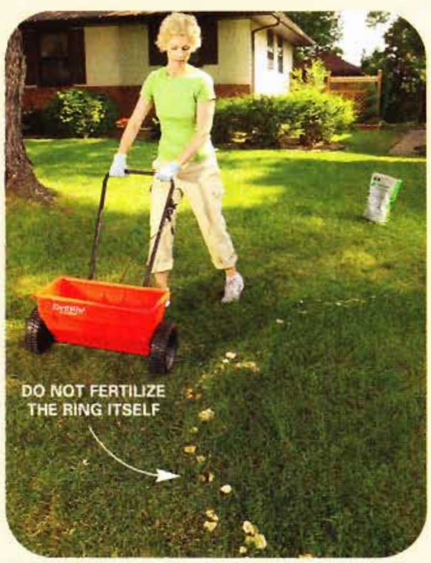
Recovery time: Generally fairy rings can be masked with the application of fertilizer, with results in 10 to 14 days. The grass within the ring will thicken up with aeration in about two to three weeks.



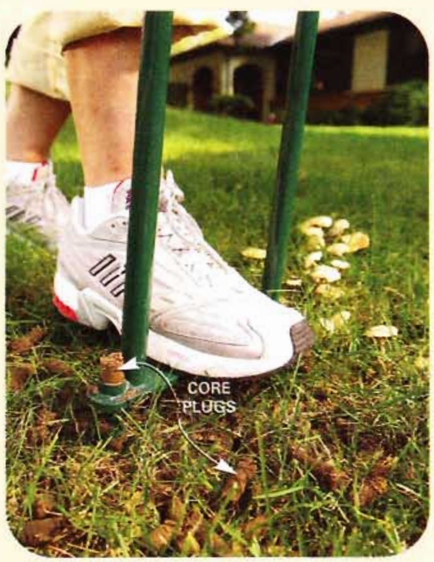
An ounce of prevention

Aeration will help with fairy rings, but maintaining a healthy lawn with a balanced fertilization program is essential. Apply three doses:

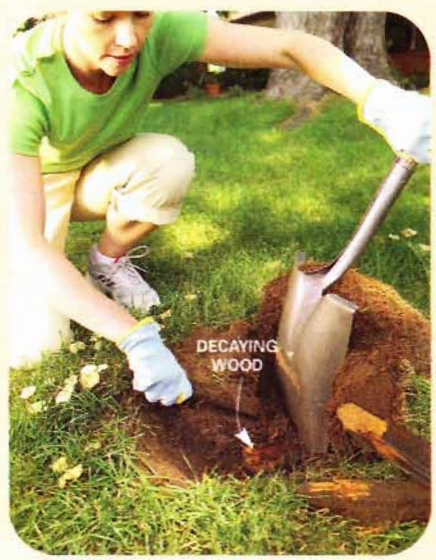
1. **Apply 1/2 lb. per 1,000 sq. ft. in late April or early May to give the overwintering grass roots a bit of a boost.**
2. **Add no more than 1/2 lb. per 1,000 sq. ft. at the end of June or in early July when temperatures are not at their peak. Stimulating growth during a heat wave will stress the plants.**
3. **Spread 1 lb. per 1,000 sq. ft. at the end of October. The best root growth takes place when the soil temps are between 58 and 65 degrees F. The roots store energy over the winter, making the entire lawn healthier the following spring.**



1 Spread 1/2 lb. of nitrogen fertilizer per 1,000 sq. ft. to green up your lawn, but skip the fairy ring zone. This masks the lush green of the fairy ring by blending it into the rest of your yard.



2 Break up the fungi with a hand aerator ($20 at a home center or garden store). Punch holes every 2 to 4 in. throughout the ring and 2 ft. beyond.



3 Go "treasure" hunting if you see no improvement in three weeks. Dig out rotting stumps, roots, construction debris or other organic materials under your lawn.

PROBLEM:
Grubs



Symptoms: Grub-chewed turf has patchy areas that wilt and die. You can easily pull up the affected turf if you tug on it. Another indicator of grubs may be increased raccoon, bird or mole activity. They like to dig up and eat the grubs at night. While this may sound good, the moles will kill the grass as they forage for grubs.

Cause: Lawn grubs are the larval stage of moths and beetles. The grubs eat the roots of grass, setting them up for death by dehydration.

Remedy: Be vigilant. Are beetles swarming around your porch light? In the next month, keep an eye out for patches of grass that wilt or are blue-green on hot days. They may be larvae infested. Turn over some turf (**Photo 1**). If you count six to 10 grubs (white wormlike larvae with black heads) under a 1-ft.-square area of sod, consider using a grub insecticide (available at home centers and nurseries). Or talk to a professional ("Grass Service" in your Yellow Pages) about treating your yard. They will be familiar with the grub problems in your region and the most suitable treatment methods.

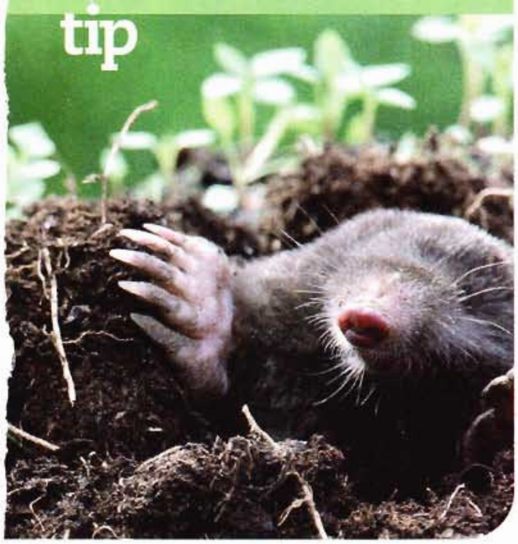
If you spot the grubs but your count is lower than six per square foot, baby your lawn to strengthen its natural defenses. Mow on higher blade settings and water thoroughly but infrequently to encourage the grass to grow new, deep roots. Do not cut off more than one-third of the grass height at each mowing, to avoid stressing the plant.

An ounce of prevention

Inspect your turf periodically by pulling on patches that look unhealthy, or have a professional inspect your lawn if you suspect a problem.

A grub problem is often indicated by increased mole, bird and raccoon activity. They dig up and feed on grubs at night. This may sound good, but moles kill your grass along with the grubs.

tip





1 Pierce lawn with a shovel in a U-shape. Peel back the lawn (as though rolling up a rug) and count the white grubs in a 1-sq.-ft. area.



2 Treat your lawn with an insecticide if the count is six to 10 grubs in a square foot. Follow the manufacturer's directions carefully. Or consult with a yard service.

PROBLEM: Shade



Symptoms: Shaded grass will look thin and patchy. Some types of grass actually produce wider blades as the plant attempts to catch more rays. But they also produce far fewer blades, lending a spindly appearance to the lawn. The cold truth is, if your lawn gets less than six to eight hours of sun daily, you are unlikely to sustain lush grass.

Cause: Trees, buildings and bushes.

Remedy: There are no good remedies. You can increase the sunlight as much as possible by trimming trees and shrubs. Also try starting areas in shade with sod instead of seed. The sod will adjust to the lower level of light. Although all seed varieties have their shade limitations, try overseeding your thin area with a shady grass mix.

Or throw in the towel, grab your trowel and plant a shade-tolerant ground cover. Many will thrive where your turf withered. Lamium (dead nettle) and ajuga (bugleweed) collaborate nicely in providing lovely blooms and an enthusiastic, but not invasive, carpet. This pair fares well, with a hearty tolerance spanning zones 3 to 8, and can be planted right up to your grass. They are fairly low growers and won't get more than a few nicks from a lawn mower.

Also, mulching between the ground cover plants will help retain moisture. This is especially wise if your new "shade garden" is on a slope; mulch will help prevent your fledging plants from washing out in a hard rain.

Recovery time: The plants and mulch will immediately boost the appearance of an area that was once thin grass. It'll take a couple of seasons for the ground cover to become established and blanket the area.

An ounce of prevention

Avoid the frustration of sun-starved grass by starting a shade garden or ground cover in any area that doesn't receive six to eight hours of good light.



Using a garden hoe, work up the shady area to remove any struggling grass. Plant ground cover or a shade garden.

Art Direction • MARCIA WRIGHT ROEPKE
Photography • BILL ZUEHLKE
Consultants • DR. HENRY WILKINSON, TURF PATHOLOGIST; PROF. ROBERT MUGAAS and BETH JARVIS, UNIVERSITY OF MINNESOTA EXTENSION





Voila!
A perfect fit!

Dash covers

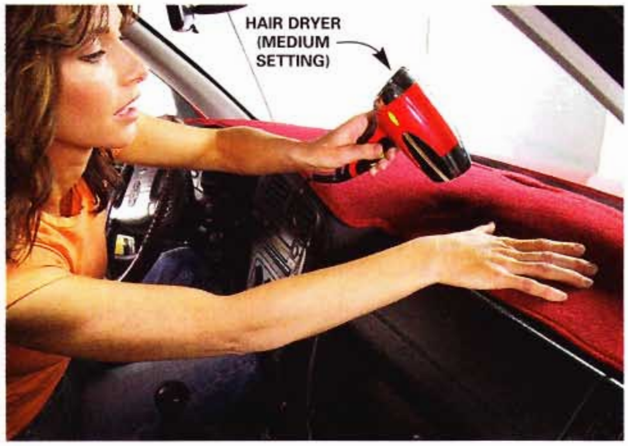
by Bob Lacivita and David Radtke

Stop the heat and glare—install a new dash cover in minutes

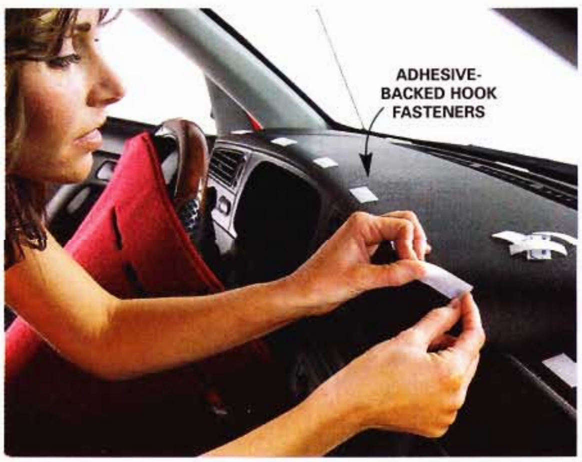
The interior of your vehicle really heats up in the summer, largely because of the solar gain through the windshield, especially if you have a black dashboard. The same can happen with the back window and the rear deck. You can help keep these two areas cooler and looking great by covering them with a custom-fit fabric mat. These fabric mats will cover an ugly, damaged dash or preserve one that's in good shape. They also reduce glare. You can select from a wide variety of colors and three basic fabric types. Go to the Buyer's Guide for on-line or catalog information and follow these simple installation instructions:



1 Clean the dash with a mild detergent and a damp sponge. Don't use a lot of water. You don't want to get moisture inside the speaker grilles. Rinse in the same manner with clean water. When your new dash or rear panel cover arrives, open the package and let the cover rest flat overnight to relax the fabric.



2 Prefit the dash cover. Lay the dash cover over your dash and use a hair dryer on medium heat to help the fabric conform to the dash. Make sure the defrost vents line up with the cutouts in the fabric. Locate any alarm, auto headlight or climate control sensors. These usually are premarked, but you'll need to cut holes for them with a razor knife. Don't cut while the cover is on the dash. Remove it and then make the cutouts.



3 Cut the supplied hook fasteners into 1-in.-long strips. The fabric back is the loop part of the hook-and-loop design. Place the strips at key points along the dash: at the front, at the far side near the windshield, at corners and at transition spots. If you need additional strips for problem areas, you can buy them at a hardware store. Read the package to make sure the strip's adhesive can withstand heat.





4 Lay a single layer of newspaper on the dashboard to keep the fasteners from gripping the cover. Position the cover, then slide the newspaper sections out one at a time while you press the cover onto the fasteners. Rub the cover with your hands to smooth it, and presto—it's done. The cover will continue to flatten out over the next few days as it conforms to the dash.

Note: When your dash cover needs cleaning, remove it and clean it with a spray-on upholstery cleaner, let it dry and then vacuum. Reinstall it as in Step 4.

Art Direction • DAVID SIMPSON
Photography • BILL ZUEHLKE

Buyer's Guide

You can buy Dash-Mats through JC Whitney Co. Call (800) 603-4383 for a catalog or go to www.jcwhitney.com. Dash covers are also available through www.godashmat.com.

Flip-up downspout

Pulling off downspout extensions and jamming them back on is a nuisance when you're mowing. But you can convert all your extensions to flip-up versions in about an hour with $4 worth of hardware. Make a 1/2-in.-deep cut across the extension about 3 in. from the end with a hacksaw. Then use metal snips to finish cutting out a notch. Fasten the extension to the downspout with sheet metal screws or 1/8-in. aluminum rivets. For smooth operation, place plastic fender washers between the two parts. Make sure the extension hangs about 1/2 in. below the downspout.

Derek Walz



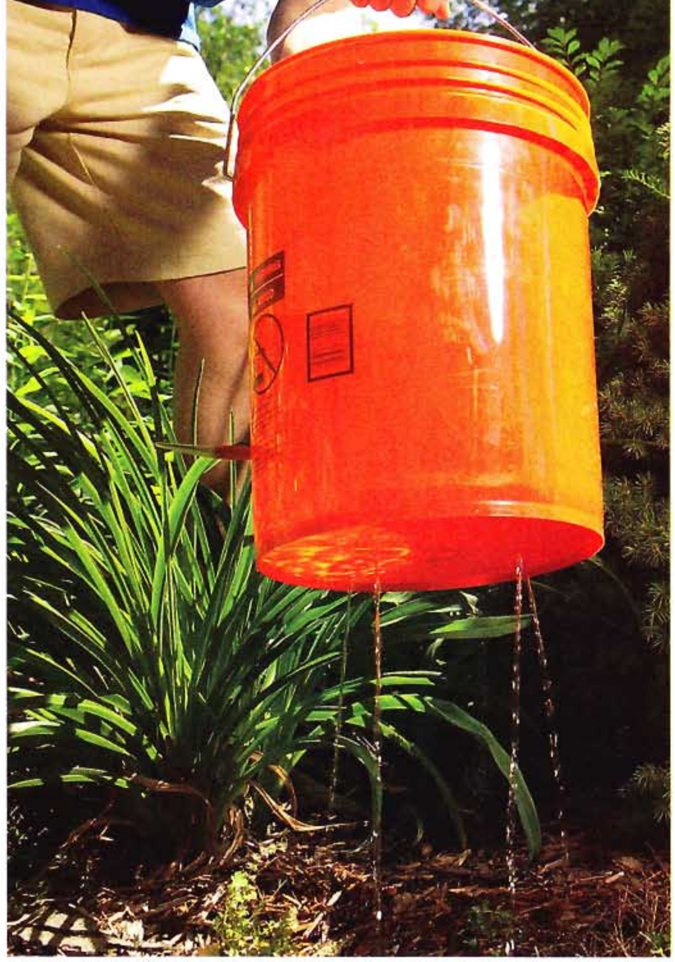
WE PAY $100 FOR TIPS

If you have a hint you'd like to share, send it to handyhints@readersdigest.com or Handy Hints®, The Family Handyman, 2915 Commers Drive, Suite 700, Eagan, MN 55121. Original contributions become our property upon acceptance and payment. We're sorry, but tips can't be returned.

Soaker bucket

When it comes to watering, slower is better because water soaks in rather than runs off the soil. Slow watering usually means running your garden hose at a trickle or using a soaker hose. Here's a way to soak the soil without dragging hoses around: Drill four 1/8-in. holes in the bottom of a bucket and set it next to thirsty plants.

David Korte



Fog-free goggles

Some people wipe shaving cream on the bathroom mirror to prevent it from fogging up. The same trick works on safety goggles. Just smear shaving cream on the goggles—both inside and out—then wipe them dry.



David Reese



Garden tool hideaway

A mailbox near your garden provides a convenient home for tools. A small mailbox like this one costs less than $10 at hardware stores and home centers. King-size models cost about $25.

Lynn Samples

Rapid inflation

On many shop vacuums, you can plug the hose into the exhaust port. And that lets you turn your vacuum into a power inflator for toys and air mattresses. A small transmission funnel ($5 at hardware and auto parts stores) makes a perfect nozzle.

Marty Comisky



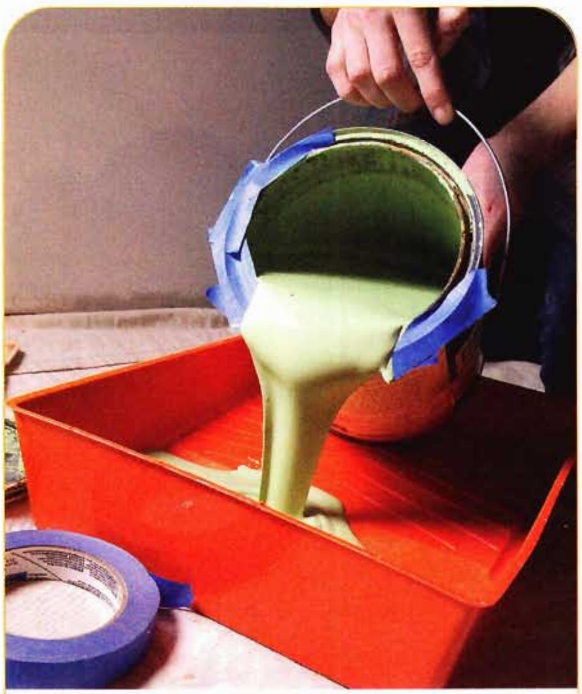
More Handy Hints on p. 94!



Nonstick mower deck

If the underside of your lawn mower develops a thick crust of grass clippings, scrub it clean and then give it a coat of spray lubricant. Products that contain silicone or Teflon work best and cost about $5 at home centers and hardware stores.

Gale Goodspeed



Keep rim rust out of paint

You can get a clean pour out of an old paint can that has dirt and rust in its rim. Just wrap the rim with tape to seal in the debris while you pour.

Patrick Nagi

Colored compound for touch-ups

After applying a final coat of joint compound on drywall, you'll probably find a few minor scratches and craters. Before you fill these blemishes, mix a few drops of food coloring into joint compound. That way, the patches will stand out from the surrounding joint compound and you won't miss them during the final touch-up sanding. To prevent the color from bleeding through, spot-prime the patches with a stain-blocking primer.

Joe W. Hurley



Editor • GARY WENTZ
Art Direction • LISA PAHL KNECHT
Photography • BILL ZUEHLKE

New low-maintenance Products

by Brett Martin



PHOTOS/FYPON®



Wood trim without the work

Fypon's low-maintenance composite trim isn't wood, even though it looks just like it. Instead, it's an extruded sandwich with a lightweight urethane core that's covered with a paintable PVC coating. Lightweight yet durable, the trim is easier to install than wood (it can be glued rather than nailed). You cut it using the same tools as for wood. Other advantages it has over wood is that it won't rot—ever—and it holds paint much better. Great for inside or outside work.

Smaller trim pieces cost about the same as similar clear wood millwork profiles. But start comparing bigger, fancier profiles and you'll find it's much less expensive than wood. In fact, most of these profiles aren't even produced in wood—you'd have to pay a fortune to have them custom milled.

Starting at $4 per foot, the products are available at some lumberyards and home centers. However, most profiles are custom order. Go to the Web site for more details and to see hundreds of photos.

Fypon, (800) 446-3040. www.fypon.com



PELLA WINDOWS AND DOORS®

Window fashions between the glass

Window blinds, shades and grilles are magnets for dust. They're also among the most difficult things to clean in your home. Wouldn't it be nice to have easy-to-operate window fashions that couldn't get dusty? Now you can, thanks to an ingenious design by Pella that places them between the panes of glass. The entire window fashion is enclosed, so there's nothing to clean. And there are no loose cords to present a safety hazard.

The windows and patio doors in this Designer Series have a hinged glass panel that swings open for changing the window fashions. Since they snap in and out, they can be easily changed in minutes for a new décor. A sliding lever next to the panes controls the blinds, shades or decorative panels. And the panels can be custom made with any picture or design.

Prices of the windows and patio doors vary by size, but the feature adds about 20 percent to a new window price. (A casement window, 25 in. by 53 in., costs $450 to $500.)

If you're still not sold on the concept, consider this: The shades, when closed, give your windows a nice energy efficiency boost. The Designer Series is available exclusively at Pella retailers.

Pella, www.pella.com

Washable flat paint

I'm often amazed by how dirty my walls get, but even more amazed by how hard they are to clean. That's why the easy-to-clean paints recently introduced by Behr and Ace are long overdue. The paints are easily cleanable with soap and water or an all-purpose cleaner.

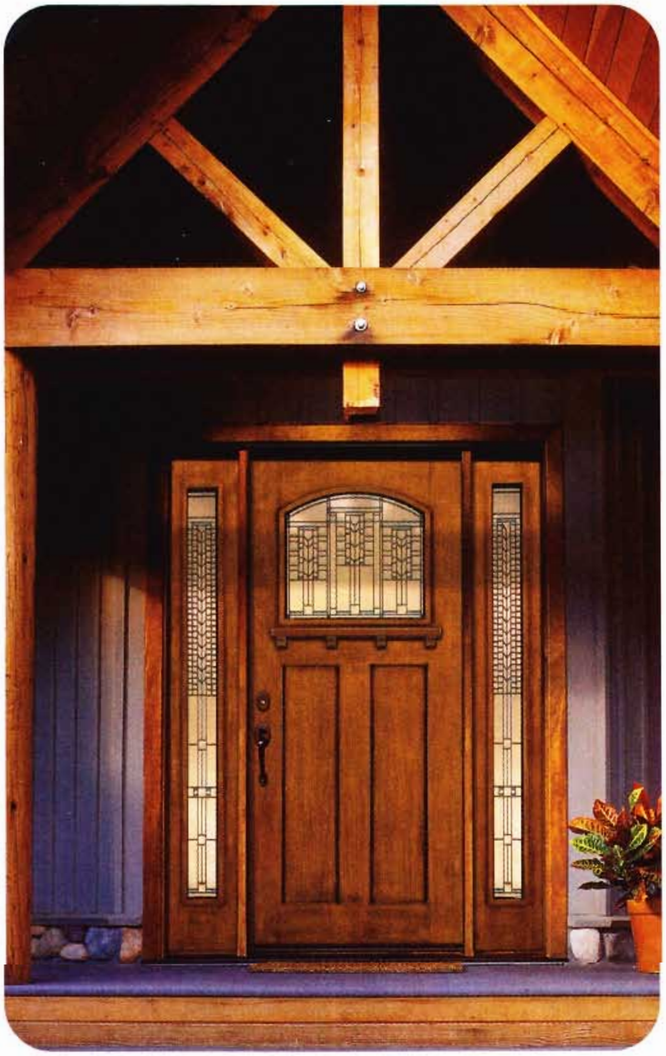
Both companies' acrylic latex paints provide a washable finish for trouble-free stain removal and will hold their original appearance after cleaning. Although the paints are flat, they clean as well as a semi-gloss. Both are also mildew resistant, making them ideal for high-moisture areas like the kitchen and bathroom.

Behr's Premium Plus interior flat enamel offers a low-luster finish. It's available at Home Depot for $22 a gallon. Ace Sensations, by Ace, contains a Scotchgard protector for stain resistance. Look for it at Ace hardware stores for $25 a gallon.



We conducted a seat-of-the-pants test by smearing spaghetti sauce, crayons and newspaper print on walls covered with the two paints. We then cleaned the walls with warm water, soap and a sponge. The stains came off the walls, although the crayons required a little bit of rubbing. But a coarser sponge washed them right off.

Behr, (800) 854-0133, ext. 2.
www.behr.com
Ace, (866) 290-5334.
www.acehardware.com



JELD-WEN WINDOWS® AND DOORS

Fiberglass doors, but you'll swear they're wood



If you're in search of a door that looks like wood but is more durable and energy efficient, consider fiberglass doors like the ones from JELD-WEN. The doors can be painted or stained, have the realistic wood grain of mahogany and alder, and when finished look so much like wood that you can't tell the difference—even up close.

According to the manufacturer, they have more than twice the amount of fiberglass of other fiberglass doors. Plus, polyurethane is used on the "skin" for increased strength. These features make the doors stronger and heavier (they can withstand hurricane forces).

At $600 to $800, the doors are less expensive than wood but more expensive than steel. They're available at door supply companies, lumberyards and some home centers.

JELD-WEN, (800) 877-9482. www.jeld-wen.com

Easy-clean bathroom fixtures

There's nothing glamorous about cleaning toilets, and I'm willing to bet there never will be. It's a chore we'd like to neglect, but when we can't, we like to get it over with as quickly as possible. The Soiree and Guinevere toilets from Toto are a step in the right direction.

Three improvements make these toilets very easy to clean. First, a super-smooth SanaGloss glaze coats the inside of the bowl with a nonporous surface that keeps dirt, mold and bacteria from gaining a foothold.

Second, a new Double Cyclone Flush Engine fires high-speed streams of water that scour the entire rim and bowl. The bowl is practically self-cleaning—no rubbing or detergents required!

Third, the one-piece toilet design makes cleaning the outside easier, too. A concealed trap and no crevices leave fewer surfaces where dirt can collect.

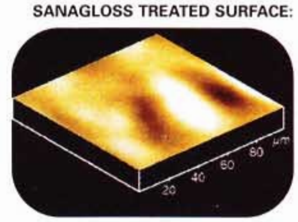
Go to the company's Web site to find a list of dealers in your area. Price varies by model and color.

Toto, (888) 295-8134. www.totousa.com



PHOTOS TOTO USA®

SANAGLOSS TREATED SURFACE:



UNTREATED SURFACE:





PHOTOS AMERICAN STANDARD®

Easy-to-clean bathroom sinks

With our two young kids, our bathroom sinks are perpetually adorned with toothpaste, soap and several mystery substances. We've accepted that they'll never stay spotless, but making them easier to clean would be a big help. American Standard's Scotchgard Protector promises exactly that.

The special factory-applied finish causes water and other substances to bead up and run into the drain instead of collecting in the sink. According to the manufacturer, the finish will last through thousands of cleanings.

Scotchgard is available on the company's Round and Oval countertop sinks ($130 to $165), sold at Home Depot and in wholesale showrooms.

American Standard, (800) 442-1902. www.americanstandard-us.com



REALISTIC WOOD APPEARANCE WITH VINYL LATTICE

PHOTOS GEOMATRIX

Lattice you can use

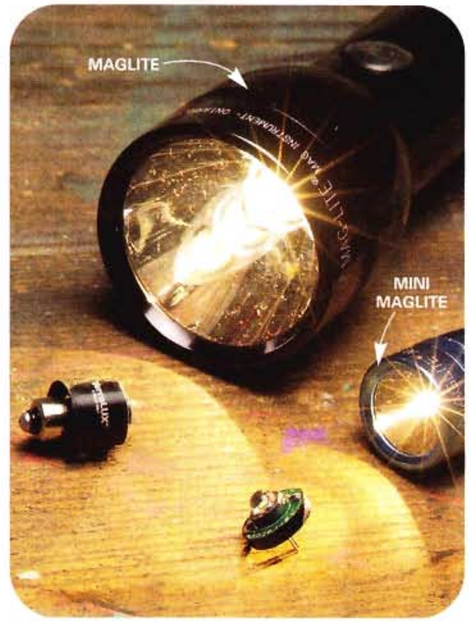
I never liked using wood lattice. It's flimsy, it looks worn even when new and it's hard to paint. Some vinyl lattice products aren't much better. They look like plastic and scratch easily.



GeoMatrix's SevereWeather plastic lattice has changed my opinion. The color goes all the way through the lattice, so scratches aren't visible. The lattice is solid and offers the maintenance-free benefits of vinyl but looks like wood.

The lattice, available exclusively at Lowe's ($15 to $25 for 4 x 8-ft. sections), comes in five colors to dress up outdoor projects. Vinyl post sleeves ($25 per 8-ft. section) are available to keep your project maintenance free.

GeoMatrix, (248) 643-7764. www.lowes.com



Long, long, long lasting bulbs

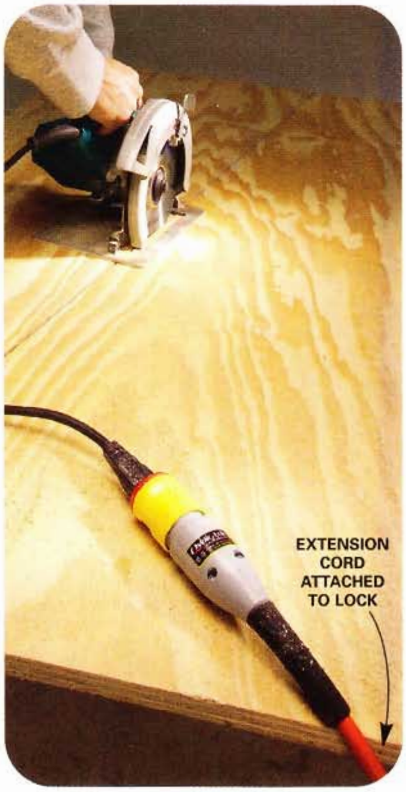
When you reach for your flashlight, you want it to work. With the new super-bright LED bulbs from TerraLUX, you won't have to worry about the light failing. The bulbs last up to 100,000 hours. You'll probably lose the flashlight before the bulb burns out!

The bulbs aren't cheap ($30 to $35), but they work in any Maglite flashlight. Since the bulbs use less energy, your batteries will last six times longer. The bulbs are nearly indestructible and offer a brighter, whiter and more constant light.

Buy them directly from the manufacturer or go to the Web site to find a retailer near you.

TerraLUX, (866) 498-1564. www.terraluxcorp.com

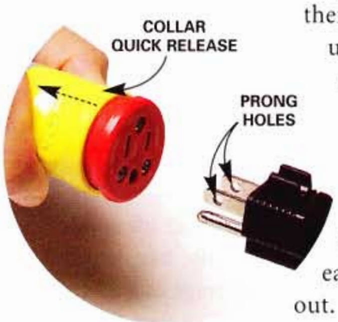




Heck of a plug holder

A photographer turned us on to this plug lock—the best we've ever seen.

The Qwik-Lok ($18) locks the tool plug and extension cord with a quick release that sends pins into the little holes on the prongs of your tool cords. There's no way your cords will separate until you want them to. To unlock, simply pull back the collar on the lock and the plug easily pulls out. The five contact points for each prong prevent connection failures, arcing and burnouts.



You'll need to install Qwik-Lok on an extension cord, but that only takes a few minutes. It can be installed on 10- to 16-gauge wire, although we had to struggle to get it on a fat 10-gauge cord. The lock is available at hardware stores.

Qwik-Lok, (866) 794-5565. www.qwiklok.com



No-stain grout

You usually don't think about your grout until you see stains or mold and have to clean it. That's when you want a tough grout—one that won't stain, like Prism SureColor grout from Custom Building Products. Instead of being sand-based, Prism grout uses 100 percent recycled glass spheres. Since the spheres aren't sharp or jagged like sand, they create a smoother texture that doesn't attract dirt. The grout is formulated to fill gaps between 1/16 in. and 1/2 in. wide.

Prism grout is resistant to stains. Liquids bead up rather than penetrate, so you can wipe them away. It's also resistant to mold and mildew.

Prism is available at select tile stores for about $33 for a 17-lb. bag, which provides the same coverage as a 25-lb. bag of standard grout. Call first. Stores that carry Custom Building Products don't always carry Prism.

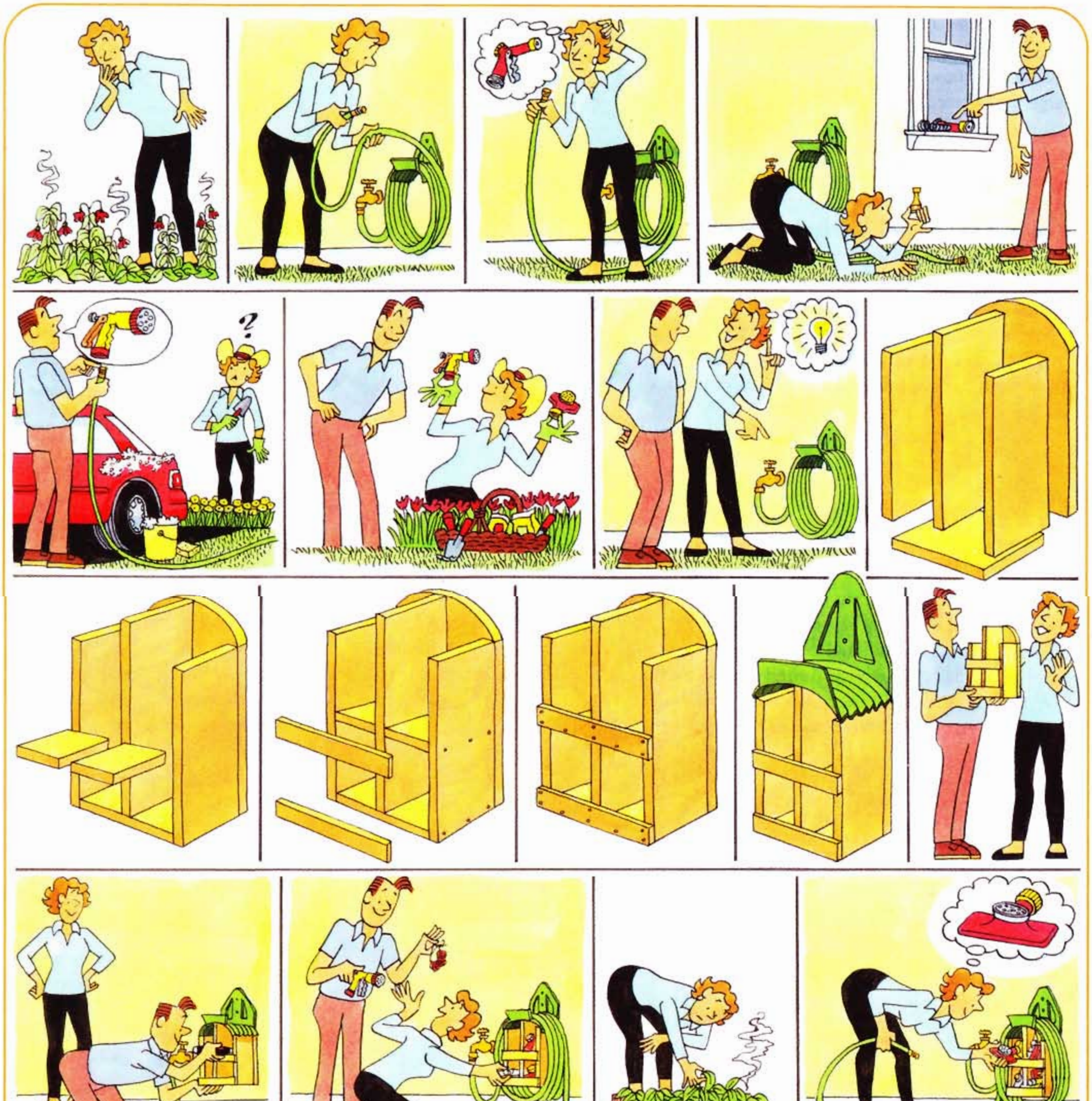
Custom Building Products, (800) 272-8786. www.custombuildingproducts.com

Art Direction • MARCIA WRIGHT ROEPKE
Photography • BILL ZUEHLKE, UNLESS OTHERWISE NOTED

Wordless Workshop™

Garden hose rack

by Roy Doty



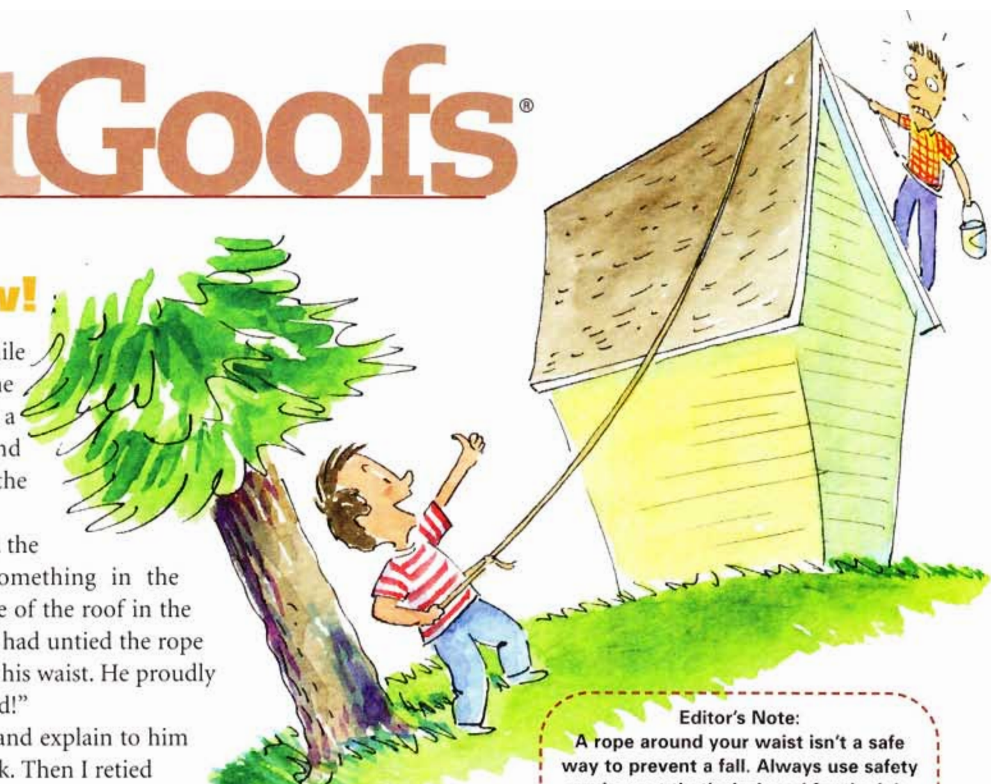
Our thanks go to Randy Johnson, Bozeman, MT, for this idea.

We'll pay $100 for any ideas published, so send in those sketches and notes!

Submit your idea to wordless@readersdigest.com or Wordless, The Family Handyman, 2915 Commers Drive, Suite 700, Eagan, MN 55121.

Only ideas we purchase can be acknowledged. Original contributions become our property upon acceptance and payment.

Great Goofs®



Look out below!

I was afraid of falling off my roof while painting a dormer, so I went to the back of the house, tied a rope around a large pine tree, tied the other end around my waist and climbed to the roof.

Just before I lowered myself toward the dormer, I heard a child saying something in the distance. I paused, walked to the edge of the roof in the back and saw that my 7-year-old son had untied the rope from the tree and wrapped it around his waist. He proudly looked up and said, "I've got you, Dad!"

Luckily, I was able to climb down and explain to him that this arrangement would not work. Then I retied the rope to the tree and asked my wife to guard it—and my safety.

—Paul Roeber

Editor's Note:
A rope around your waist isn't a safe way to prevent a fall. Always use safety equipment that's designed for the job, such as roof brackets and a personal fall arrest system (aka "roof harness").

Dismantled dryer

When I tossed a load of wet towels into our clothes dryer and pushed the start button, the dryer made an unbearably shrill squealing noise. "Sounds like it's just a belt slipping," said my husband, Eric, pleased with his budding home repair skills.

Hours later, however, he still couldn't find a way into the dryer to remove the screaming belt. In fact, he was doubly embarrassed because he couldn't reassemble the large number of small parts strewn around him on the floor. He declared defeat.

A pro came out the next day and made no comment when I handed him the bag of dryer parts.

Then he demonstrated how easily anyone could open the large, hinged panel on the front of the dryer with a simple tug!

—Larrilyn Lindquist



Lights out

I do all my own wiring—and have done so for years—so installing new light fixtures and switches should be child's play for me.

I set out to replace two sconces and their three-way switches. The job seemed routine, and I was done in a few minutes. Then I turned the circuit breaker back on and hit the switch. Nothing.

Puzzled, I checked the wiring of the switches. It looked just fine, but I had to try something. So I changed the order of the wires on the first switch. Still no light.

I tried again, then again, until I had tried every possible combination of connections. The lights still didn't work. Then my wife came by and asked what was wrong. After I explained the situation, she asked, "Did you put in the bulbs?"

Feeling relieved but embarrassed, I installed the bulbs, put the connections back the way I originally had them and then there was light.

— B.W. Battin

Got your own do-it-yourself mistake?

We pay **$100** for each one we print. Write to greatgoofs@readersdigest.com or Great Goofs, The Family Handyman, 2915 Commers Drive, Suite 700, Eagan, MN 55121. *Original contributions become our property upon acceptance and payment.*

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